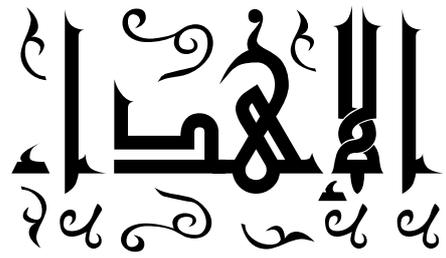
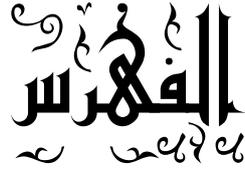


بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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[Support@alshater.net](mailto:Support@alshater.net)





5	.....
7	.....
10	.....
15	..... unit
16	.....
18	..... ( Events )
20	.....
24	..... Memo
27	.....
29	..... Data Type
35	.....
43	.....
48	..... Dialog
52	..... MaskEdit
55	.....
60	.....
69	.....
77	.....
86	..... Database Desktop
100	.....
111	.....
117	.....
118	..... SQL :
123	.....
131	..... Access

137	.....	ADO
140	.....	
146	.....	
147	.....	
150	.....	Windows Registry
154	.....	Windows API
158	.....	
167	.....	
169	.....	
182	.....	
184	.....	
183	.....	
197	.....	Install Shelled Express

# المقالة

:

2003

2006

:

- 1

1997

:

- 2

2

C#

2005

:

1997

98

2004

PHP

:( Visual Basic.Net )

..

:

..

.

.

!!

.. !

)

!!

."

":(

..

-

:

RAD (Rapid Application

Development)

)

(..

(

) Active X

### IDE

IDE (Delphi Integrated Development Environment).

:

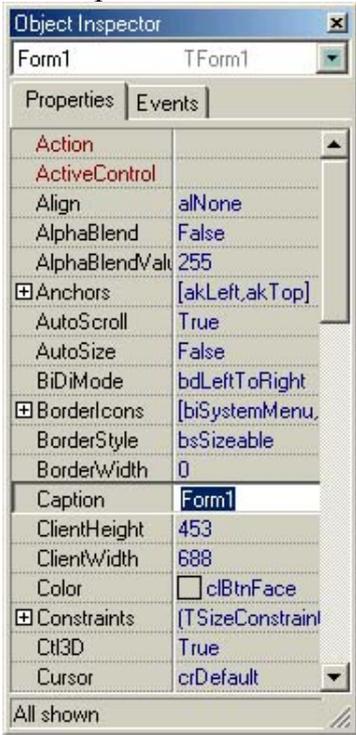
1 :



(

)

( ) : 2



Properties

Events.

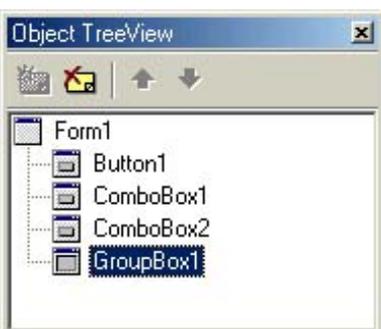
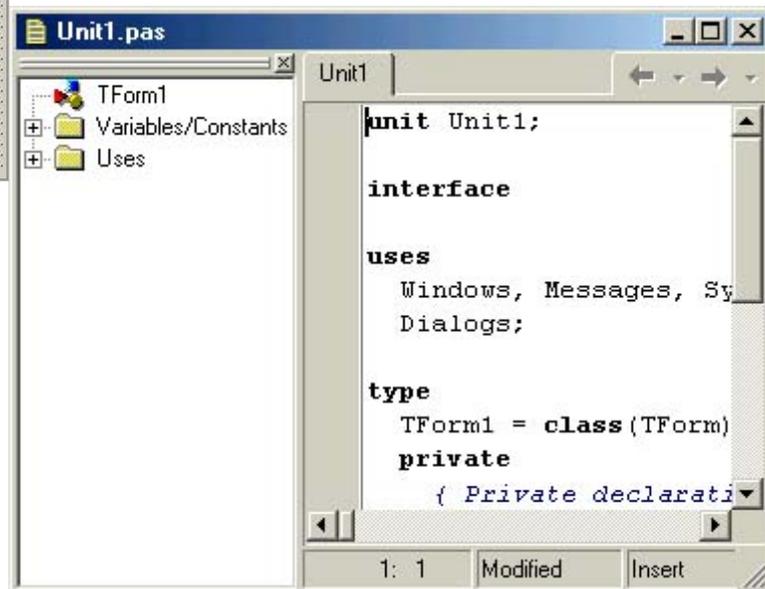
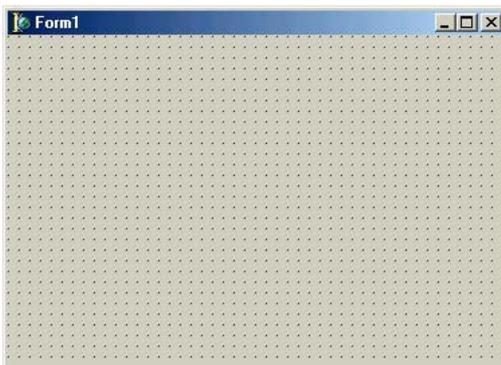
Property  
Events

Event

( )

Event Handler

: 3



: 4

:

File :  
:  
: File Menu 1  
: New  
: Application ( 1 )  
: CLX ( 2 )  
:Data Model ( 3 )  
: Form ( 4 )  
: Frame ( 5 )  
:  
: Others ( 6 )  
: Open  
: Open Project  
: Reopen  
: Save  
Unit : Save As  
: Save Project As  
: Save All  
: Close  
: Close All  
: Use Unit  
: print

( )  
( )  
( )  
( \* .dpr )  
( \* .Pas )  
Main Program  
( Use ) Use

:

:

. File → New → Application

1

:

2

( )	bdRightToLeft	BiDiMode
	280	Height
	350	Width
		Caption
( )	poDesktopCenter	Position

Standard

( Button)

2

:

**: Button1**

	RedButton	Name
		Caption
( )	160	Top
( )	230	Left

**Button2**

	GreenButton	Name
		Caption
( )	190	Top
( )	203	Left

**Button3**

	CloseButton	Name
		Caption
( )	200	Top
( )	24	Left

```

form1.Color := clred ;
  clred    Color

```

```

form1.Color := clgreen;

```

```

close;

```

1

2

3



File → Save Project As  
NewCloros

ChangeCloros

Run

F9

Run

( Run → Run )

1

( Form1 )

+

: BorderIcons



False

: BiSystemmenu

False

: BiMinimize



False

: BiMaximize

)

True

: BiHelp

: **BorderStyle**



Tab : TabOrder  
 Tab

: 1

	BtnAbout	Name
		Caption
( )	0	Top
( )	0	Left
	40	Width

: File → New → Form

:

	About	Name
( )	bdRightToLeft	BiDiMode
	250	Height
	300	Width
		Caption
	poDesigned	Position

Save

aboutunit

Ctrl + s

File

( Form1 )

. Form1

About

: Uses

implementation

:

**implementation**

uses aboutunit ;

:

about.Show;

.(

BtnAbout

) About

Show

: About

: Standard ( ) Panel 1

( )	AlTop	Align
	" "	Caption
	185	Height
	bvLowered	BevelOuter
Align	Width	

: Button 2

	BtnClose	Name
		Caption
( )	192	Top
( )	112	Left

Panel Additional Image 3

)		picture
:		
C:\Program Files\Common Files\Borland Shared\Images\Splash\256Color		
Image	True	Stretch
( )	0	Top
( )	0	Left

: Panel Label 3

Label1

	Caption
24	Top
168	Left
	font

Label2

:	Caption
88	Top
212	Left
	Font



Close

BtnClose

```

Unit
:
unit Unit Name ;
interface
uses
  Windows, Messages, SysUtils, Variants, Classes, Graphics, Controls, Forms,
  Dialogs;
type
  TForm1 = class(TForm)
  private
    { Private declarations }
  public
    { Public declarations }
  end;
var
  Form1: TForm1;
implementation
end.

( NewColors ) Unit 1
: Interface
:
: Uses
)
. (
( ) TForm : Type
Type )
: Type ( AboutUnit NewColors
: Private
: Public
)
.end; Type
Form1 TForm1 Form1 ( ) : Var

```



```

http://www.alshater.net
Listbox1.items.add (edit1.text);
(
)
:
listbox1.DeleteSelected ;
:
Listbox1.items.clear ;

```



**: ( RadioButtons )**

4

```

form1.Color := clred;

form1.Color := clblue;

form1.Color := clcream;

```

True Checked

. ClCream

**: GroupBox**

5

```

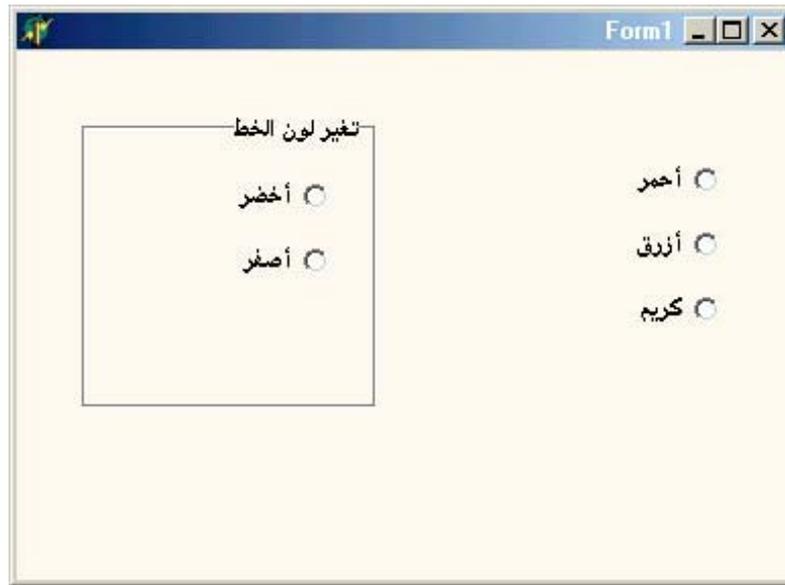
)

:

form1.Font.Color := clgreen;

form1.Font.Color := clyellow

```



: ( Events )

OnClick

OnClick

) Button

( x,y )

: OnMouseMove 1

y = top

X = left

:

Label

Event

( Form1 )

:

OnMouseMove

**procedure** TForm1.FormMouseMove(Sender: TObject; Shift: TShiftState; X,  
Y: Integer);

:

End Begin

label1.Caption := inttostr(x);

label2.Caption := inttostr(y);

: OnMouseDown 2

( Form1 )

:

:

OnMouseDown

Event

label1.Left := x;

label1.Top := y -10;

label2.Left := x+20;

label2.Top := y-10;

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```

)
Label
. (
y X
: OnMouseLeave 5
OnMouseMove Label
label3.font.color := clblue;
:
OnMouseLeave
Label3.font.color := clblack;
Label3
.
: : On DblClick 4
Close; : On DblClick Label3
Label3

```

:

:

1

Shift

shift

Label

:

2

:

+ Ctrl

+ Ctrl + Shift

:

+ Shift

:

3

... Shift

Edit Label

)

( Caption, Text

... Width, Height, left, top,

:

Alignment View

Alignment palette

: Edit

: Alignment palette



:



)



(



.(

)



)

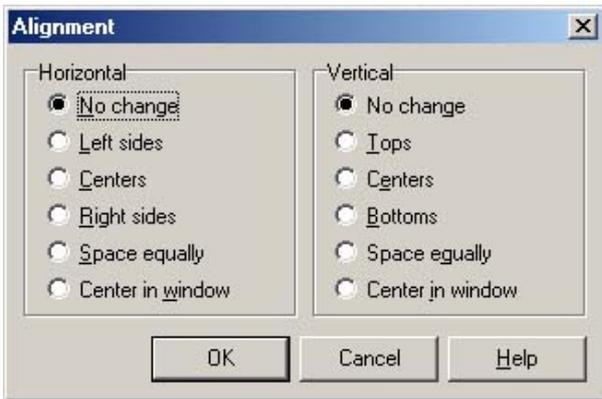


:

Edit

Align

: **Alignment**



:

Edit

Lock Controls

:

:

Paste

Edit

Copy

Cut

:

(

)

Application

Application

File → Options

Title setting

```

)
( )
(
Load Application Project → Options EXE
) Icon
C:\Program Files\Common Files\Borland Shared\Images\Icons

```

**: ShowMessage**

showmessage (S : string)

Ok

Button



showmessage(' ');

**: MessageDlg**

Yes

NO

Function **MessageDlg**(const **Msg**: string ; **DlgType**: TMsgDlgType; **Buttons**: TMsgDlgButtons ; **HelpCtx**: Longint): Word

: Msg

: Dlgtype

: mtWarning

: mtError

: mtInformation

: mtConfirmation

: mtCustom

: Buttons

mbYes,mbNo,mbOK,mbCancel,mbAbort,mbRetry,mbIgnore,mbAll,mbNoToAll,mbYesToAll,mbHelp

[ ]

.( \* .HLP ) :HelpCtx

mbOK	mrOk
mbCancel	mrCancel
mbYes	mrYes
mbNo	mrNo
mbAbort	mrAbort
mbRetry	mrRetry
mbIgnore	mrIgnore
mbAll	mrAll
mbNoToAll	mrNoToAll
mbYesToAll	mrYesToAll

mrok

OK

:

: ( 1 )

Button

if MessageDlg(' ',mtConfirmation  
,[mbyes,mbno],0)= mryes then close;

. Yes

No Yes

: 2



messagedlg( ' ',mterror,[mball,mbyestoall,mbNoToAll,mbIgnore],0) ;

: **InputBox** 3

: Cancel Ok Edit

InputBox( const ACaption, APrompt, ADefault: string ): string ;

: ACaption

: APrompt

: ADefault

. Edit



form1.Caption := inputbox(' ', ' ');

**: Memo**

( 256 )

Lines

:

True

**: WordWrap**

Tab

6

True

**: WantTabs**

Enter

True

**: Wantreturns**

. False

True

**: ReadOnly**

:

**: Alignment**

)

**: taRightJustify**

( bdRightToLeft

BiDiMode

)

**: taLeftJustify**

( bdRightToLeft

BiDiMode

.

**: taCenter**

Button

Memo

:

:

" " Caption

Memo1.Lines.SaveToFile( 'c:\a.txt' );

)

( )

. ( a.txt

:

" " Caption

Memo1.lines.LoadFromFile( 'c:\a.txt' );

(

)

**: Bitbtn**

:

. ( Caption )

1

:

2

. Kind

)  
 C:\Program Files\Common Files\Borland Shared\Images\Buttons  
 Glyph

Glyph

3 NumGlyph  :

False Enabled

: **SpeedButton**

BitBtn

: Flat 1

: GroupIndex 2

Glyph

Speedbutton

1 GroupIndex

: ( MDI SDI )

SDI

: MDI

FormStyle

		<b>FormStyle</b>
	SDI	fsNormal
	( )	fsMDIForm
		fsMDIChild
		fsStayOnTop

MDI

. fsMDIForm Form1 Formstyle 1

. fsMDIChild Formstyle 2

3

```
fsStayOnTop      Form1      : fsStayOnTop  
                  )  
                  . (      Formstyle
```

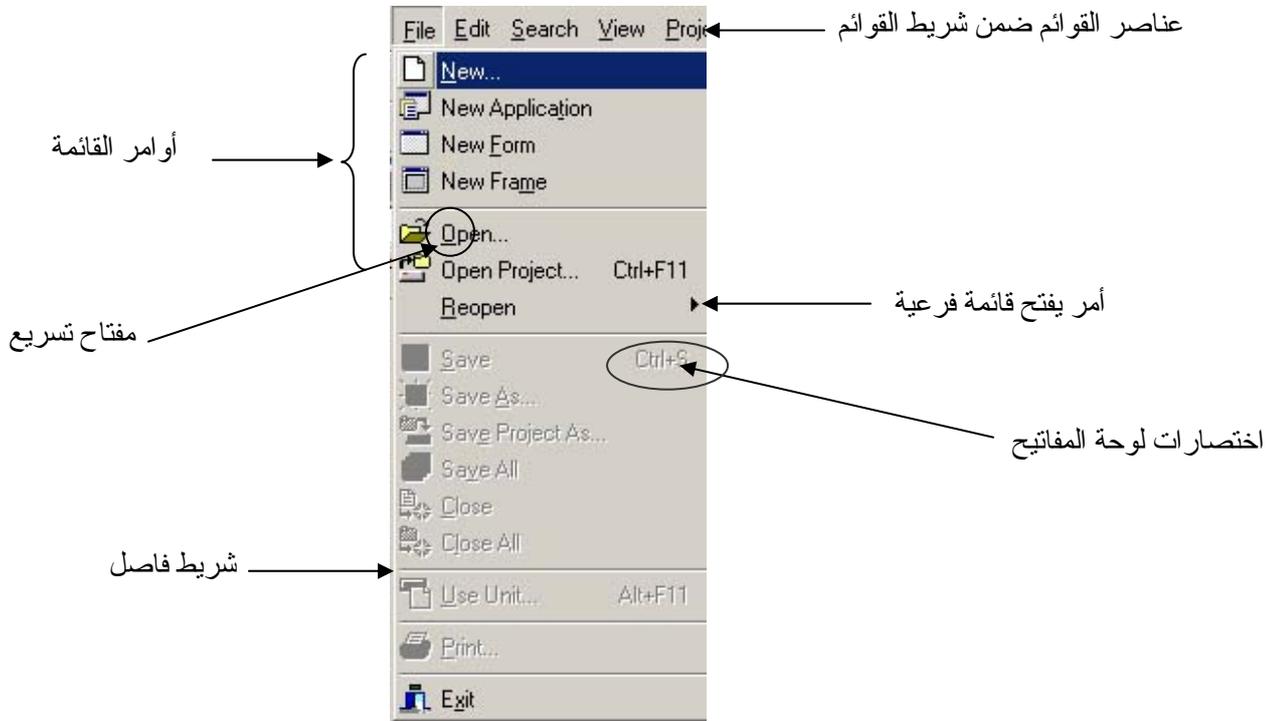
:

. ( Popup Menu )

( Main Menu )

:

: ( Main Menu)



:

Standered

MainMenu

1

:

( Menu Desigenr )

2

Items

Menu Item )

Menu Desigenr

Caption

(

: ( & )

Caption

3

. Caption

&

. ( & )

Caption

4

. ( & ) Caption

5

-

Caption

6

	.	&	Caption	7
	.	& Caption		8
Ctrl + c		Shortcut	Caption	9
	.	Ctrl + X	Shortcut	Caption
	.	Ctrl + V	Shortcut	Caption
			:	
		Caption		12
	:		Create SubMenu	
			:	
		Delete		1
Insert			Delete	2
	)			3
			(	
mbBreak		Break		4
			mbBarBreak	
			mbNone	
			:	
				5
		Event	OnClick	
		MDI		6

**: ( Popup Menu )**

. Main Menu

:

Panel

PopUpMenu

:

:

```

:
Showmessage ( "you click the first button" );
:
Showmessage ( "you click over the second button " );
:
Showmessage ("you click over the third button")
:
Showmessage ("you click over the fifth button" )
        . PopUpMenu1                PopUpMenu
        .PopUpMenu2                Panel    PopUpMenu
        . Panel
    
```

**: ( Comments)**

```

:
        {                                } 1
        (*                               *) 2
        //                                // 3
    
```

Editor Font                      Display                      Property Editors                      properties  
 ... Ok                      Courier New ( Arabic)

**:Data Types**

(Object Pascal)

(2147483648- )	(2147483647)	<b>Integer</b>
(127) (128-)	( 2)	<b>Shortint</b>
(32767) (32768-)		<b>Smallint</b>

(-2147483648)	(2147483647)	<b>Longint</b>
(225) (0)		<b>Byte</b>
(65535) (0)		<b>Word</b>
(0)	(2147483647)	<b>Cardinal</b>
$2*10^{63}-1$ )	$(-2*10^{63})$	<b>Int64</b>

( 8 ) ( 7 )	$3.4*10^{38}$	$1.5*10^{-45}$	<b>Single</b>
( 12 ) ( 11 )	$1.7*10^{38}$	$2.9*10^{-39}$	<b>Real</b>
Double Extended			
( 16 ) ( 15 )	$1.7*10^{308}$	$5.0*10^{-324}$	<b>Double</b>
( 20 ) ( 19 )	$1.1*10^{4932}$	$3.4*10^{-4932}$	<b>Extended</b>
( 20 ) ( 19 )	922337203685477	-922337203685477.5808	<b>Currency</b>
( 20 ) ( 19 )	$9.2*10^{18}$	$-9.2*10^{18}$	<b>Comp</b>

:

False True		<b>Boolean</b>
C	Boolean	<b>ByteBool</b>
C	Boolean	<b>Wordbool</b>
C	Boolean	<b>Longbool</b>

:

	. Character	<b>AnsiChar</b>
) Unicode Windows 2000,Xp . 16 ( )		<b>WideChar</b>
WideChar	Windows 98,Me AnsiChar . Windows 2000,Xp	<b>Char</b>

:

2 4		<b>AnsiString</b>
	. ( 0 ) 1	
2	256 ( 0 ) 256	<b>Sortstring</b>
4 Unicode . ( 0 ) 1		<b>WideString</b>
AnsiString Shortstring	WideString {H-} implementation	<b>String</b>

. ( Null )

Null	<b>PAnsiChar</b>
AnsiChar	
Null	<b>PWideChar</b>
WideChar	
Char	<b>Pchar</b>

	<b>Pointer</b>
--	----------------

( )

	<b>Variant</b>
--	----------------

:

: **Boolean** 1

Edit Button

```
var a:Boolean;
i,j:integer;
begin
i:=strtoint(edit1.text);
j:= strtoint(edit2.text);
a:= i>j;
if a then showmessage (' ') else showmessage (' ')
('
```

: **Shortstring** 2

: : Edit Label

```
var a:shortstring;
begin
a:=edit1.text;
form1.Caption := inttostr(word(a[0]));
if word(a[0]) >= 4 then
label1.Caption := a[3]+a[4];
65 Word('A') Word
```

```

: String      2
S      Length('s')
:
:
: Edit      label
var a:string;
begin
a:=edit1.text;
label1.Caption := inttostr(length(A);
label2.Caption :=inttostr(length('asdfgh');
: Pchar      3
Var P:pchar;      : Pchar      P
'Hello      ;Form1.Caption := p      :      Begin
p:= All.....'
:
s: string;
begin
s:= 'HELLO ALL.....'#0      ;
p:= @s[1];
form1.Caption := p;
. Null      s      Null      #0
. s      @
: Variant (      )      4
:
var v1,v2,v3 :variant;
begin
v1:= 5;
v2:= 20;
v3 := v1+v2      ;
form1.Caption := v3;
: EvariantError
v1:= 5;
v2:= 'asd';
v3 := v1+v2      ;
:
v1:= 5;
v2:= '123';
v3 := v1+v2      ;

```

```

: Variant
compiler
interpreted
.
:
Interface
private
.
. Public
:
: Private
private
I :integer;
: Public
public
x:integer;
: OnCreate
I := 4 ; X := 24;
OnCreate
procedure TForm1.FormCreate ( X,I
.(
:
form2.Show ;
.( Uses
)
:
Form2.Caption := inttostr ( Form1.X) ;
X
Implementation Var

```

```

Implementation Var
Y: string = 'abcd'; F : double = 55;

```

: Const

Implementation Type

Implementation

Const

```

pi=3.14;
pi2=22/7;
programmer = 'Khaled';

```

Const

```

Pi :Real = 3.14;
pi2:single =22/7;
programmer :string= 'Khaled';

```

```

function      procedure      :      routine

```

result

parameters

```

procedure Hello;
begin
  ShowMessage (' ');
end;

```

```

function Double (Value: Integer) : Integer;
begin
  Double := Value * 2;
end;

```

Implementation

```

:
Hello
:
Form1.caption := inttostr( Double(6));
:
1
Procedure ProcedureName ( var1,var2,var3: anytype ;
var4,var5:any type) ;
Begin
...
...
end;

:
Procedure Add( x,y : integer) ;
Begin
Y:= x+y ;
End;

: Label
var i,j:integer;
begin
i:=1;j:=2;
add(i,j);
label1.Caption := inttostr(i);
label2.Caption := inttostr(j);
. y x Add
: ( ) 2
Procedure ProcedureName ( var1,var2,var3: anytype ;var
var4,var5:any type) ;
Begin
...
...
end;

:
Add

procedure add(x:integer;var y:integer);
begin
y:= x+y;
end;
. j y y x Add

```



Add :

```

procedure add(var x:integer;var y:integer=5);
begin
x:= x+y;
end;

```

: Add

```

Add ( I,j) or Add( I )

```

: overload

4

Label :

```

procedure change( i :integer; var s :string) ; overload;
begin
s:=inttostr(i);
end;
procedure change( i:tdatetime; var s :string) ; overload;
begin
s:= datetostr(i)
end;
procedure change( i:tdatetime; var s1,s2 :string) ;
overload;
begin
S1:= datetostr(i);
S2 := datetostr( i+1);
end;

```

:

```

Var a:string ;
begin
change ( 5,a) ;
Label1.Caption := a ; end;

```

:

```

Var B:String ; begin
Change ( date,b);
Label2.Caption := b; End;

```

:

```

Var A,B:string; begin

```

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Change ( date,a,b);

Label1.Caption := A; Label2.Caption := B; end;

**: Result 6**

: Result

: Add

Function add( x,y:integer) : integer; Begin Add := x+y; End;	Function add( x,y:integer) : integer; Begin result := x+y; End;
---	--

:

. Interface

**: Var Interface 1**

Procedure Add( x,y : integer) ;

: Implementation (Begin... end)

Procedure Add( x,y : integer) ;

Begin

Y:= x+y ;

End;

**. Type 2**

Private Type :

Procedure Add( x,y : integer) ;

: Implementation Add

Procedure TForm1.Add( x,y : integer) ;

Begin

Y:= x+y ;

End;

: Form1 Add

Form1.add ( x,y ) ;

```

:
Procedure procedureName ( var parameter1 : array of anytype
; par2,par3:anytype );
Begin
.....
.....
end;

```

( )

:

```

Function add( a:array of integer): string ;
var h,i,s : integer;
begin
s:=0;
h := high(a);
for i:= 0 to h do s:= s + a[i];
result:= inttostr(s);
end;

```

)	High
3 [2..3]	3 [0..3]
	. 88 [22..88]

```

:
form1.Caption := add([1,3,4,89])

```

A[0]	:
.	Add )

**: ProgressBar**

```

Setup )

```

(  
:

```

: Timer Win32 Progress Bar
: OnTimer 100 Interval
if progressbar1.Position < 100 then
progressbar1.Position := progressbar1.Position+1;

```

**: ProgressBar**

```

Min ProgressBar : Position 1
. Max

```

```

        . Position          : Min 2
        . Position          : Max 3
    :                        : Step 4
        progressbar1.Position := progressbar1.Position+1;
        .                    True          : Smooth 5
ProgressBar pbVertical          : orientation 6
    ( 100 ProgressBar Height          )
        : TrackBar:

1000 Max Win32 TrackBar :
        1 Min
        Onchange
        timer1.Interval := trackbar1.Position ;
trackbar1 Interval
        : ontimer
        if progressbar1.Position < 100 then
        progressbar1.Position := progressbar1.Position+1
        else progressbar1.Position := 0;
        .
        :
        :
        :
        (For ,Repeat ,While)
        progressbar :
        :

var i :integer;
begin
for i := 0 to 100 do
progressbar1.Position := i
) ( )
:

var i,j :integer;
begin
for i := 0 to 100 do begin
for j := 0 to 90000 do ;

```

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```
progressbar1.Position := i  
end;
```

```
for j := 0 to 10000 do ;
```

```
    :  
Form1.color := clred;  
    (                )
```

```
progressbar
```

```
For j := 0 to 90000000 do  
Application.ProcessMessages ;  
    )  
    .(
```

:  
:

Uses

Math

x	Abs(x)
$e^x$	Exp(x)
Floor(2.8) = 2; : X Floor(-2.8) = -3	Floor(x)
Frac(234.987) = 0.987: X	Frac(x)
Int(234.987) = 234	Int(x)
$X^Y$ intpower(2,3)=8;intpower(2,2)=4	IntPower(X,y)
). X True (	Isinfinite(X)
$X*2^Y$	LdExp(x,y)
Len(e) = 1 : X	Ln(x)
Log10(10) = 1 : X	Log10(X)
Y X	LogN(Y,X)
Max(3,6) = 6 :	Max(X,Y)
Min(3,6) = 3:	Min ( X,Y)
3.14159265358932358	Pi
$Y[0]*X^0+Y[1]*X^1+...+Y[n]*X^n$	Poly ( x,y:array of double)
$X^Y$	Power ( X,Y)
Round ( 1.5) = : X 2;Round(1.4)=1;Round(1.6) =2	Round ( X)
X=0 0 X -1 X 1	Sing(X)
$X^2$	Sqr(x)
$\sqrt{X}$	Sqrt(x)
Trunc(5.022) = : X	Trunc(x)

5;Trunc(5.999)=5

```

:
: Isinfinite(X) 1
:
:
var v: variant;
x:double;
begin
x:=1/0;
v:= isinfinite(x);
if v then
form1.Caption := 'true';
. Integer X 1/0 X
: Poly ( x,y:array of double) 2
:
var v: variant;
begin
v:= poly (4,[2,3,4,5]);
form1.Caption := v;
: 2
:
Integer ('A') = 65; Integer ('a') = 97;
Char ( 97 ) = 'a'; Char (48) = '0'; char (65)= 'A';
Boolean(0) = false; Boolean ( 1 ) = true;
:
:

```

int64	Strtoint	Strtoint64
Floattostr(5.5e3)='5500';Floattostr(5.5)='5.5'	: X	Floattostr(X)
. ( )	X	FloattostrF(x,,,,)
Strtfloat(3.3)= 3.3; : S	Strtfloat( 3.3e4)=33000	Strtfloat(s)
.	S	Strtocurr(S)
y X	:	Inttohex(X,y)

```

:
function FloatToStrF(Value: Extended; Format: TFloatFormat ; Precision, Digits: Integer):string ;
    Value
    :
    Format
    : (1)
    Format = FFGeneral 1
    Value
    Precision
    Digits
:
form1.caption := floattostrf(55.2723e+3, ffgeneral,5,2);
5 Precision 55272
4 55272.3 7 5
. 527e4 :
Format = FFExponent 2
(ddd.edd)
0..4 Digits Precision
form1.caption := floattostrf(52.34, ffexponent,8,3);
: 2 3 4 8 5.2340000e+001
5.234E+01
Format = fffixed 3
: Digits
form1.caption := floattostrf(100.36, fffixed,6,1);
100.4
Precision
Format = ffNumber 4
form1.caption := floattostrf(195784430.36, ffnumber,10,5);
. 195,784,430.4000

```

: Format = ffcurrency 5

) .  
.(

form1.caption := floattostrf(195784430.36, ffcurrency,10,5);  
195,784,430.4000 .

: Inttohex(X,Y)

2345 929 inttohex(2345,1); :

J:=\$F I:=2345 I:= \$929) ... Integer (J=15

:

:

:

F1

(Floattostrf Format )

:

:

Currency

Strtfloat

See Also

Strtfloat

F1

) Category

(Strtocurr )

( Floating point Conversion Routines

) Strtfloat

.(

:

:

Math

(

)

F1 ( Power ) math )

)

Power

.(math

. Sysutil (..... Strtoint)

:

```

:
:
Help → ( ( ) )
Delphi help
Find ) Find
( )
( Sin )
(Sin)

```

```

Help Other Standard routine )
.(topic
:

```

. F1

.... F1

: Dialog

) Dialogs

: ( ....

: OpenFileDialog



( Open )

FileName

:

Memo

:

OpenDialog

:

IF OpenFileDialog1.Execute then

memo1.Lines.LoadFromFile( openFileDialog1.FileName ) ;

open ( TXT )

True

OpenDialog1.Execute

( Open )

False

openDialog1.FileName

( Cancel )

openDialog1.FileName

Filter

: Filter

Filter

...

\*.txt

Filter

Name

Txt

Filter

" Files Type

" \*.Bat " Filter

" Filter Name

. " \* . \* " "

```

Files Type
1 : FilterIndex
.... 2
: InitialDir
... C:\ C:\
: Title
" "
: Option
.
: SaveDialog
.
:
" " Caption SaveDialog
: SaveDialog
*.txt ..... : Filter 1
*.bat ..... :
: .Txt : Defaulttext 2
:
if savedialog1.Execute then
memo1.Lines.SaveToFile(savedialog1.FileName )
....
OfOverwritePrompt Option
.
Ture
: OpenFileDialog
.
Filter
:
. OpenFileDialog Image
:
if OpenFileDialog1.Execute then
image1.Picture.LoadFromFile(OpenPictureDialog1.FileName )

```

```

        . Image           Open
        *.jpg           Filter      Jpg           :
                        . Uses      Jpeg
                        : SavePictureDialog
(           ) .....
                                                .....
                                                :
SavePictureDialog           SavePictureDialog

        :           .Bmp      DefaultExt
if SavePictureDialog1.Execute then
image1.Picture.SaveToFile(SavePictureDialog1.FileName)
        )
        .( Save As Type

                        : FontDialog

                        FontDialog      Label
                                                :
if FontDialog1.Execute then
label1.Font := fontDialog1.Font ;

                        : ColorDialog

        :           ColorDialog
if colorDialog1.Execute then
form1.Color := colordialog1.Color ;
        Define Custom colors           ColorDialog
        .           RGB
                        Dialog           :
        Xp           98

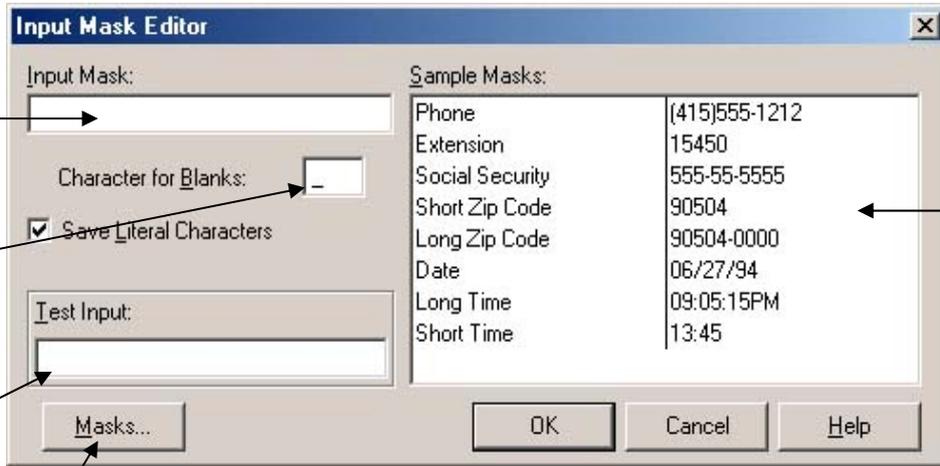
```



( Additional ) : MaskEdit

Edit

Editmask



Editmask

Additional

MaskEdit

1

Ok

Date ( Sample Masks )

\_\_\_/\_\_\_/\_\_\_

99999

00000

LLLL

..... : a  
: A

.....

( Win32 ) : MonthCalendar

...

: OnCreate  
MonthCalendar1.Date := date;

:

form1.Caption := datetostr(MonthCalendar1.Date);

.. ( ) alClient Align

Calendar Sample :

( Win32 ) : DateTimePicker

: ( )

dtkDate Kind 1

MonthCalendar

dmUpDown DateMode

.....

Timer dtkTime Kind 2

: OnTimer

DateTimePicker1.Time := time;

: 3

Form1.Caption := TimeToStr(DateTimePicker1.Time );

:

Form1.Caption := Datetostr(DateTimePicker1.date );

( Win32 ) : PageControl

:

:

Win32 PageControl

TabSheet1 New Page

. TabSheet3 TabSheet2

```

" " Caption TabSheet1
. MonthCalendar
" " Caption TabSheet2
... dtkTime Kind DateTimePicker
" " Caption TabSheet3
.... dtkTime Kind DateTimePicker
..
ESC ) PageControl
. alClient Align (
Add Win32 ImageList
PageControl Ok
ImageList1 Images
... ImageIndex tabSheet
TapPosition
PageControl Style
tpTop TapPosition ) tsFlatButtons tsButtons
. (
ActivePage
True : HotTrack
. ( )
( Win32 ) : TabControl
PageControl
)
:
. 5 :
1,2,3,4,5,6,7,8,9 Tabs TabControl
. TabControl Label
: OnChange
var i :integer;
begin

```

<http://www.alshater.net>

```
i := strtoint(tabcontrol1.Tabs[tabcontrol1.tabindex] );
label1.Caption := inttostr(i) + ' * 5 =';
label2.Caption := inttostr(i * 5);
```

```

        .
        . [ ]
        ...
        .
        ( Win32 ) : UpDown
        Edit    UpDown
Edit    UpDown1    Edit    UpDown
        . Edit    Edit1    Associate
        . Edit    Increment
        . Edit    Max    Min
        . ( )    Position
        . True    Orientation
        . Up    : Warp
        SpinButton    SpinEdit    Sample    Down
        :
        : Concat    1
Concat ( s1, [s2..sn]) :string
        S1..Sn
        :
        :
var s1,s2,s3 : string;
begin
s1:= 'abc';
s2 := 'efg';
s3:= 'hij';
form1.caption:=concat(s1,s2,s3)

Form1.Caption := s1+s2+s3;
        : Copy    2
Copy ( S:string , Index,Count :Integer ) :String
        . Count    Index    S

```

... Copy ( 'Hello All',5,1) = o ; Copy ( 'Hello All',2,6) = ello A :

: **Delete** 3

**Delete ( Var S:string ,Index,Count ) ;**

Index

S

Count

:

:

var s1 : String;

Begin

s1:= 'Hello All' ;

Delete (s1,1,3);

Form1.Caption := s1;

Delete ( S1,4,3)

lo All

. HelAll

: **DupeString** 4

**DupeString ( S: String ,Count :Integer) :String;**

Count

S

DupeString( 'Ha ',5) = Ha Ha Ha Ha Ha :

StrUtils

: **Insert** 5

Insert ( S1:String , var S:string ; Index :Integer ) ;

. S

S

Index

S

S1

:

:

var s : string;

begin

s:= 'Hello Friends' ;

insert ( 'All ' ,s,7);

form1.Caption := s;

: **StuffString**

**StuffString( s:string , start, length :integer , S1:string ) :string;**

Start

S

S1

: Length

S

stuffstring('Hello Friend',7,6,'all') = 'Hello all' :

. Insert

0 6

all

:

**StuffString**

**S**

**Insert**

**2**

. (

StrUtils

**: LeftStr**

LeftStr(S:String ,Count : integer) :string

: Count S

. LeftStr( 'Good Morning,4 ) = Good LeftStr( 'Hello Frind',6) = Hello :

:

: RightStr

**Rightstr( 'Hello Friend',6)=Friend :**

: LowerCase

. ( )

**S**

**LowerCase(Hello Friend) = hello friend :**

: UpperCase

**UpperCase ( ' Hello Friend') = HELLO FRIEND**

: Trim

**S**

:

:

Edit

edit1.Text:= Trim(edit1.Text );

' Hello All '

Edit1

. 'Hello All'

TrimRight TrimLeft

**: Format**

**Format ( S :String ; A:array of const ) ;**

**S**

**A...**

:

:

var s1:string;

var i,j :integer; z:real;

begin

i:= 200;j:=5; z:= i/j;

http://www.alshater.net

```
s1:= format('If You Divide %d by %d the result will be %g',[i,j,z]);
```

```
form1.Caption := s1;
```

. If You Divide 200 by 5 the result will be 40

%d

%d ( I )

. %g Z

%

Format

:

	d (decimal)
	x (hexadecimal)
	p (pointer)
PChar	s (string)
	e (exponential)
	f (floating point)
	g (general)
	n (number)
Currency and : - .date/time formatting variables	m (money)

:

:

Edit

```
ShowMessage( Format (' %s',[Edit1.Text]));
```

.....

Edit

```

:
TSrings
Lines      ListBox      Items
      . Tstrings      Memo
      TStringList.Create      TStrings
      .
      Free
:
Tstrings      Free
      . (      )
:
:
:
:
Edit      ListBox
:

```

```

var a:TStrings;
Begin
a := TStringList.Create; //
a.Add(Edit1.text); //
Form1.Caption := a.Strings [0]; //      ( 0 )
ListBox1.Items.AddStrings(a); //      ListBox      a
a.Free ;
end;

```

**TsrtingList.Create**

```

:
TStrings
:
:
:
Public      TStrings      A
:
      OnCreat

```

```

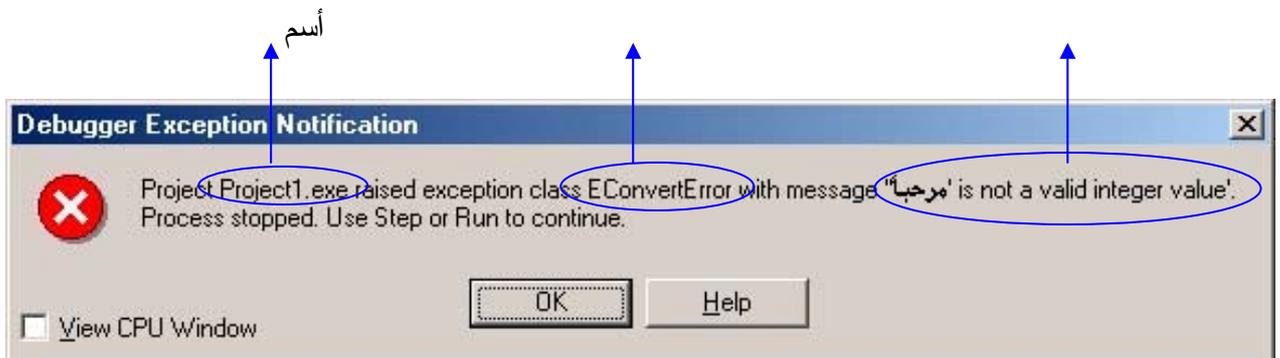
A := TStringList.Create;

```

```

OnDestroy
:
A.Free;
)
Free Create
:
)
.....
Exceptions
(
Try
: Try..... Except 1
( )
End Except End Try
:
Edit
:
var i :integer;
begin
i:= strtoint(edit1.text);
( ) Edit
:

```



### EconvertError



Exception1

Exception1

**Var** i :integer;

**Begin**

**Try**

i:= strtoint(edit1.text );

**Except**

Showmessage ( 'المربعيا is not a valid integer value.' );

**end;**

Except

(

. Try

Try . . End

Edit

: 2

Edit

**var** i,j :integer;z:real;

**Begin**

**Try**

i:= strtoint(edit1.text);

j:= strtoint(edit2.text );

z:= i/j;

edit3.Text := floattostr(z);

**Except**

http://www.alshater.net

```
Showmessage ( ' ');
```

```
end;
```

```
    Edit1
```

```
    Except
```

```
End Except
```

```
Except Try
```

```
    Edit2
```

```
    / 0 / Edit2
```

```
    /232/ Edit1
```

```
( " ")
```

```
EzeorDivide
```

```
:
```

```
Var i,j :integer;z:real;
```

```
Begin
```

```
Try
```

```
i:= strtoint(edit1.text);
```

```
j:= strtoint(edit2.text);
```

```
z:= i/j;
```

```
edit3.Text := floattostr(z);
```

```
Except
```

```
On Econverterror Do Showmessage ( ' ');
```

```
On EZeroDivide Do shOwmessag(' ');
```

```
end;
```

```
Do EconvertError
```

```
: On Econverterror Do
```

```
...
```

```
: EmathError )
```

```
EzerDivide )
```

```
( .... EintError
```

```
( ErangeError
```

```
EconvertError
```

```
.....
```

```
: Try ... Finally 2
```

```
:
```

```
: 1
```

```
:
```

```
Var a:tstrings ;
```

```
i:integer;
```

```
begin
```

```
a:= Tstringlist.Create ; //
```

```

http://www.alshater.net
i:= strtoint(edit1.text);//
i:= i * 5;
a.Add(inttostr(i)); //
Form1.Caption := 'Done'
a.Free ;

```

```

Edit
a.Free
EConvertErrorr
) a
Form1.Caption := 'Done'
(
:

```

```

Var a:tstrings ;
i:integer;
begin
Try
a:= Tstringlist.Create ; //
i:= strtoint(edit1.text);//
i:= i * 5;

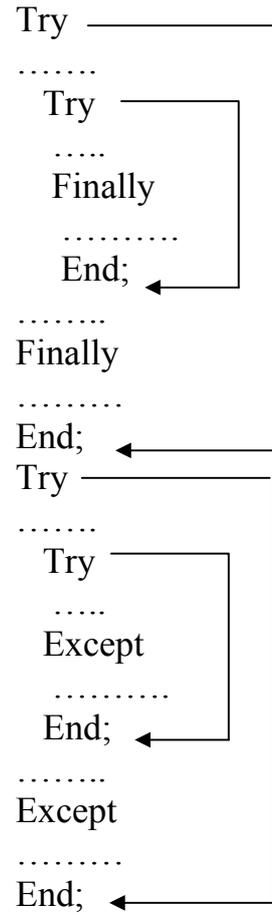
a.Add(inttostr(i));
Finally
Form1.Caption := 'Done' ;
a.Free ;
end;

```

```

Finally Run
. ( )
Finally Try Finally
. ( Finally Edit )
: Try
Try

```



```

) ( Except ) Try
( Finally
.
:
( Bugs )
) ( Debug
: 1
.
:

```

Run

Trace into



Run

Step Over

F7



. F8

Trace Into

Trace Into

Step Over

:

ListBox

```

Var s:string ;
i , j ,z :integer;
begin
for i := 0 to 500 do
begin
j:= i * 5;
z:= j * 2 ;
s:= inttostr ( j ) + ' ' + inttostr(z);
Form1.Caption := s;
listbox1.Items.Add(s)

```

Trace Into F7

F7

F7

listbox1.Items.Add(s) F7

I

I

....S Z

j:= i \* 5

F7

I

s Z j

I

:

Trace Into

Step Over

Step Over

Application.Run

**: Run To Cursor**

Run To Cursor

F4

Run

:

:

Run To Cursor

Add Breakpoint

F5

Ok

Run

:  
: 1

View

View → Debug Window → Breakpoints

Enable

: 2

: 3

( .... F5

View → Debug Window → Breakpoints

.... Breakpoint → Delete All

: 4

)

( 500 j

j = )

Condition

Breakpoint Properties

( 500

: 5

Breakpoint Properties

Pass count

100 Pass Count listBox1.Items.Add(s)

. 100

:

:

Debug → Add

1

Watch at Cursor

. Ctrl F5 Run

Add Watch 2

View → Debug Windows → watches View

Watch List 3

View → Debug Windows → :

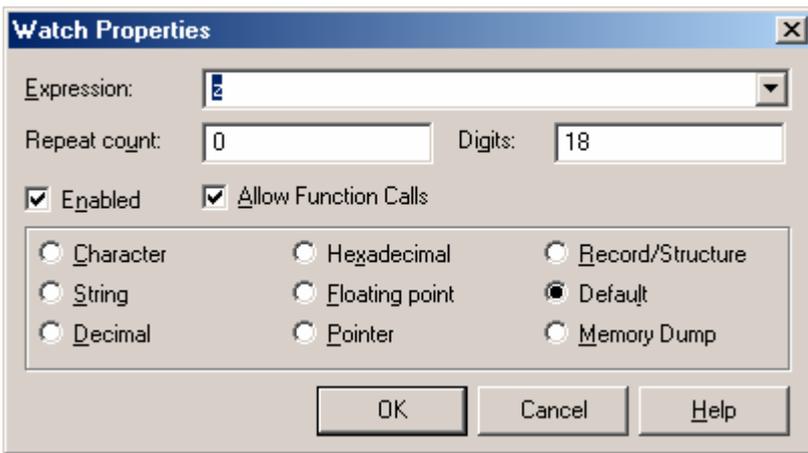
:

watches

Disable

. Delete

Edit Watch



Expression

i+j

: Repeat Count

Expression

/4 /

Repeat Count

Hexadecimal

Digits

. Floating Point

:

View → Debug Windows → call

Stack

Add ( 10 );

:

:

Procedure Add ( x );

:

Add

Begin

X := x +1;

If X < 50 then Add ( x ); // 50

End;

\_\_\_\_\_:

Database

File

Hard Disk

.

.

)

( )

( )

(

SQL Server

Access

.

Database Management Systems (DBMS) "

"

"

Structured Query Language (SQL) "

\_\_\_\_\_:

:

( )

	1997/1/2			1255
	2002/2/9		VB.Net	1256
	1944/3/3			1257
	2000/4/2			1258
	1990/3/12			

.( ) :

:

)

.(

)

(

( )

LongInt Integer

. Date

)

)

(

.(

:

..

..

ID

..

100

( )

..

" " " " " 100 : " "

	1997/1/2	50		1255
	2002/2/9	56	VB.Net	1256
	1944/3/3	100		1257
	2000/4/2	100		1258
	1990/3/12	100		

	50
	56
	100
	114



Byte

..! 48 12 " "

8 100 32000

30 20 ..

600 600 = 20 × 30000

60 60 !

( ) 3 ..

66 = (2 + 20) × 3000

126 = 66 + 60 =

!

.. " " : ( ) ..

..

!

:

Normalization ..

. ( )

**:Relational Databases**

Relationship

: ..

.Key field " " -

Primary Key " " -

.. Unique

Foreign Key " " -

..

..

" " Master " " -

.. Detail

..Join " " -

..

One-to-many Relationship " " -

..

Many-to-many Relationship " " -

" " ..

:



) Harry potter

( 2003

).

(

:

1

2

3

4

5

6

1

:

2

:

3

:

.....

..... :

1

:

)

( )

. ( .....

2

:

- 1
- 2
- 3

. Paradox, dBASE, FoxPro, and Access. :

Microsoft SQL

Server

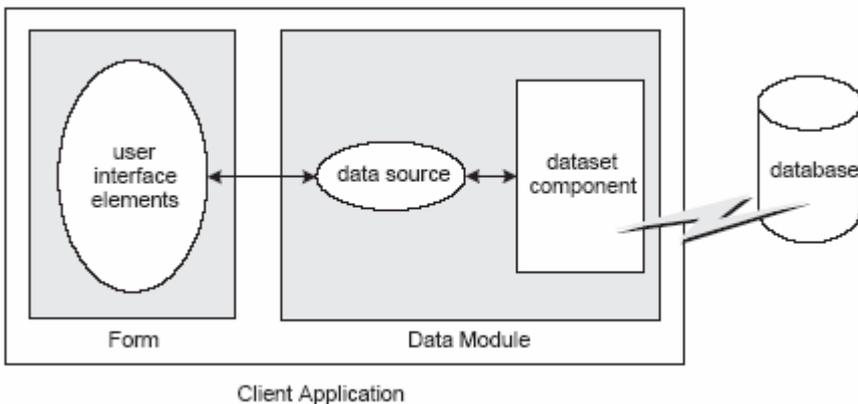
( 3.6 TB

### Structured Query Language (SQL)

InterBase, Oracle, Sybase, Informix, Microsoft SQLserver, :

and DB2.

3



: Data Access ) :

.  
:  
( )

)

Oracle

Data

.Access

:

:

: 1

( Form Wizard )

. Database

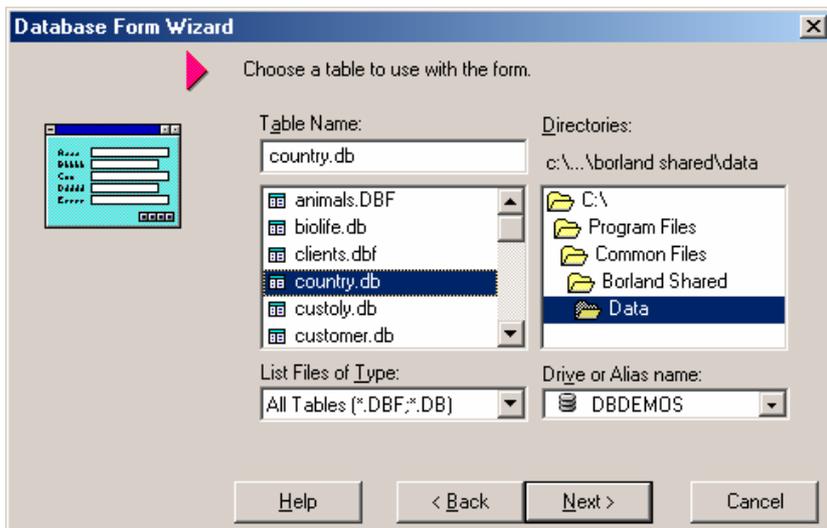
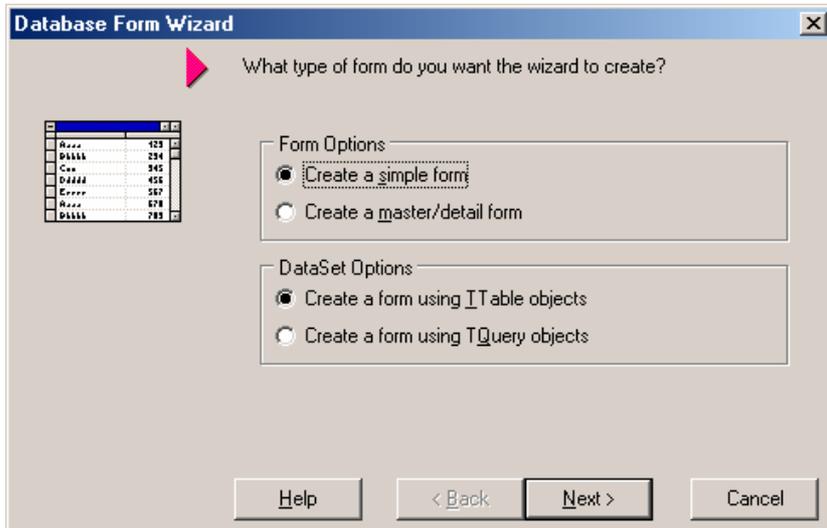
File → Close

( )

Ctrl+F4

Database → Form Wizard

Next



DBDEMOS

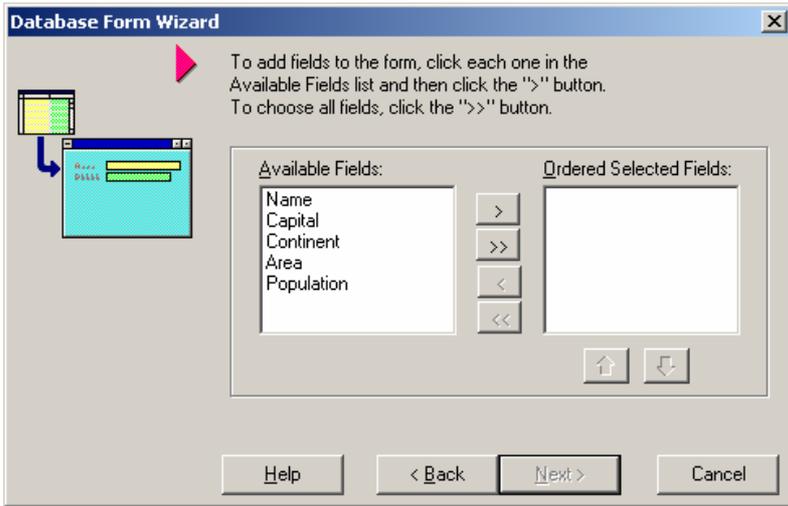
) Drive or Alias Name

(

DBDEMOS

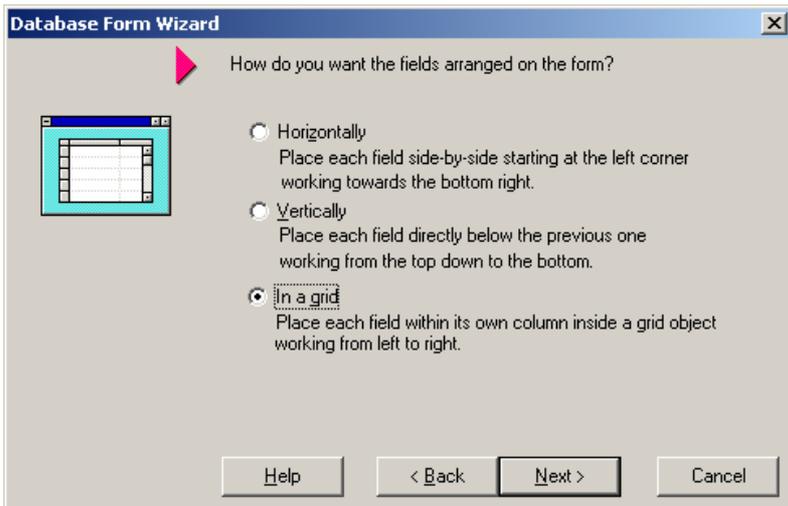
Country.db

. Next



>  
 >>  
 <  
 <<  
 . ( >> )

Next



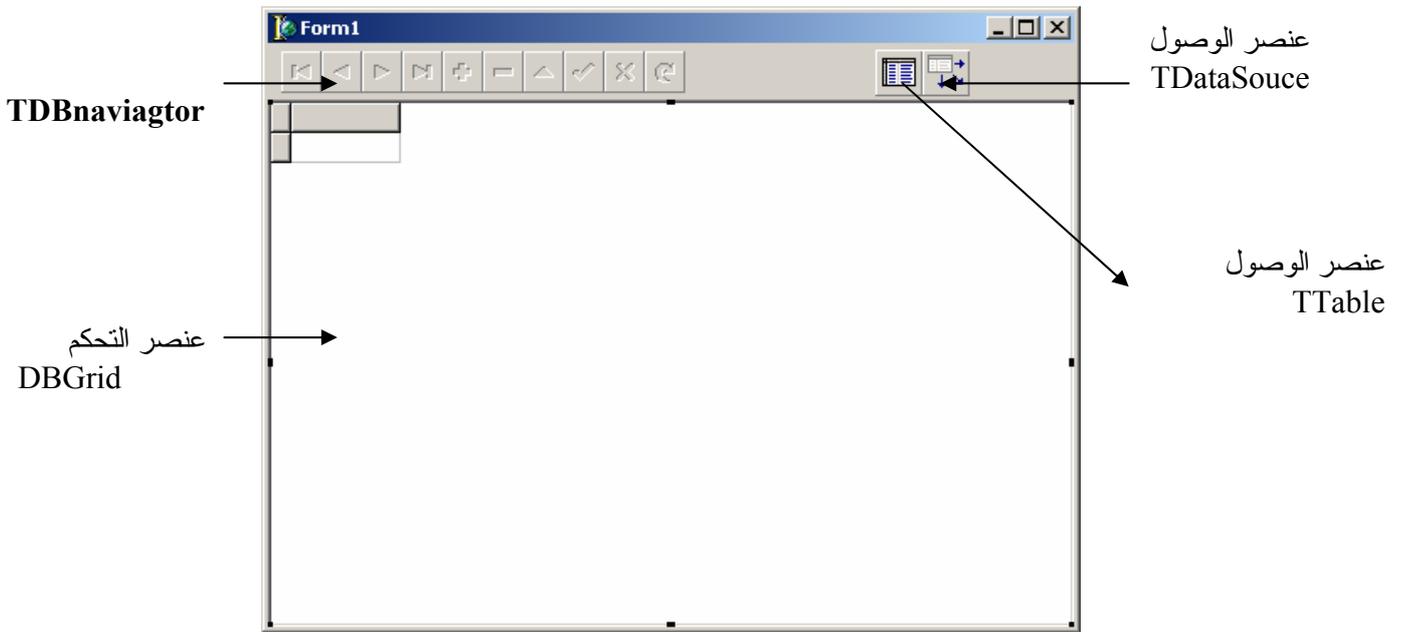
:  
 ( In grid )

Next

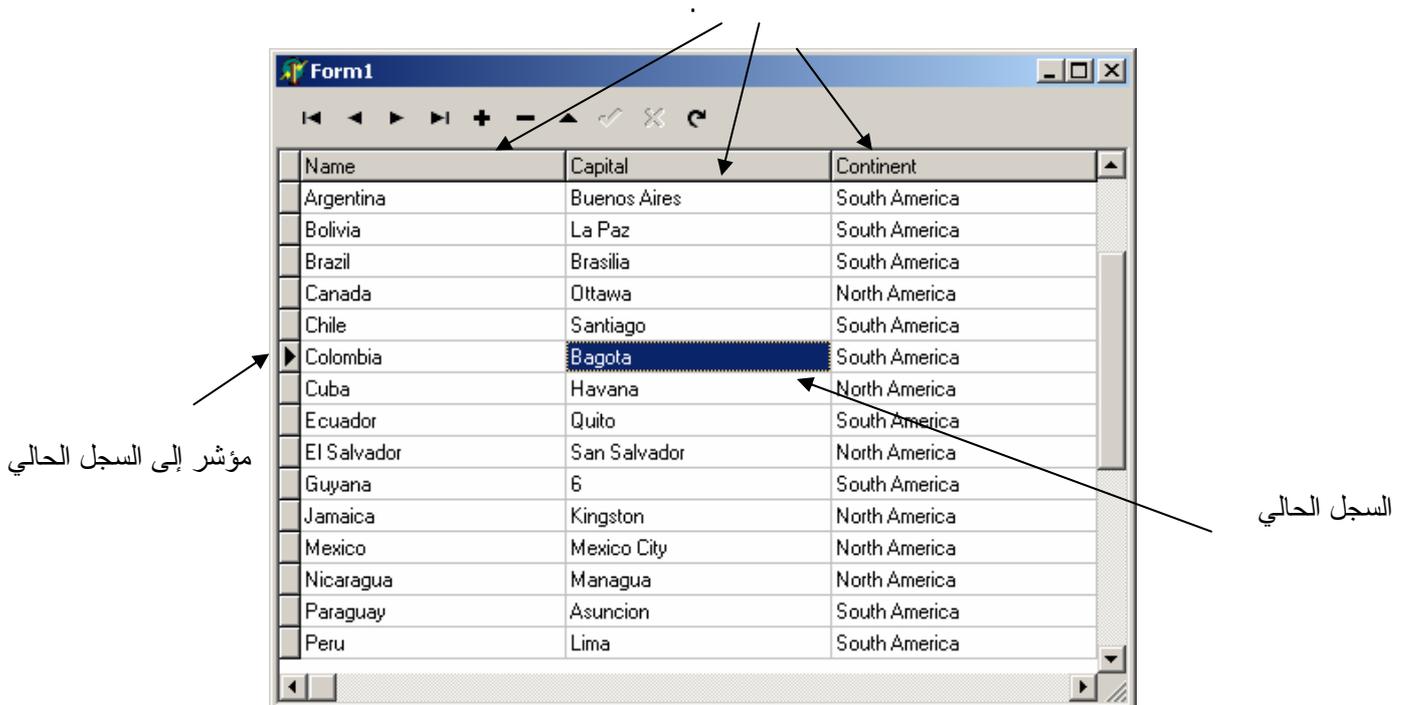


)  
 (  
 Generate a main form

Finish



1  
2  
DBGrid



:

**: Table**

DataSet

Table, Query, AdoTable, AdoQuery,

Table

:

DBDEMOS ) ( )	DBDEMOS	DataBaseName
	country.db	TableName
) (	Table1	Name
True	False	Active

**: DataSource**

DataSet

Table

:

( ) ( ) False	True	AutoEdit
Datasource	Table1	Dataset
)	Datasource1	Name

--	--	--

: ( DBGrid )

Datasource

:

<b>DBGrid</b>	<b>Datasource1</b>	<b>Datasource</b>
	<b>Dbgrid1</b>	<b>Name</b>

: DBNavigator

True

DataSource

Datasource

ShowHint

Table1.Open

. True

Table

Active

: ( Database Engine )

:

: Borland Database Engine : BDE 1

Bde

. Dbase Padox

: Microsoft ActiveX Data Objects : ADO 2

Access

Ado

. Oracle SQL SERVER

:Interbase 3

Interbase Express

.

Interbase

:

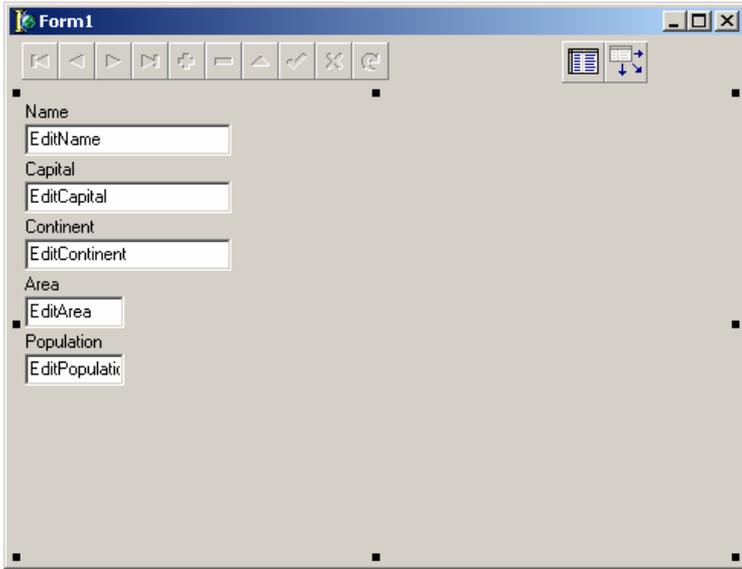
: 2

( Vertical )

Finish Next

( Left )

:



Dbedit  
 Datasource  
 DBNavegator  
 )  
 (

DataSource1  
 DBEdit

Datasource

Datacontrole  
 DBGrid

DBGrid

:( Master \ Detail Form )

:3

Customer.db

Orders.Db

: Customer.db :

( .....

: Orders.db

( .....

. (

Form Option

Create Master Detail Form

Next

Driver or alias name DBDEMOS

Customer.db

. in a grid

DBDEMOS Orders



CustNo

Available Indexes

Master Fields

CustNo

CustNo

Detail Fields

Next

Add

Next

Master

... Detail

Datasource

Table

Tabel2

DataSource	Datasource1	MasterSource
	CustNo	IndexName

: 1

DBDemos

Country.db

BDE

Table

1

. Data Access

DataSource

\_ 2

: Table

DBDEMOS	<b>DBDEMOS</b>	<b>DataBaseName</b>
) ( )		
	<b>country.db</b>	<b>TableName</b>
True	<b>True</b>	<b>Active</b>

: DataSource

( )	True	AutoEdit
( )	False	
Datasource	Table1	Dataset

: DBNavigator DBGrid

DBGrid	Datasource1	Datasource

: 2

: **Master Detail Form**

DBGrid DataSource Table

. DBNavigator

: ( Master ) 1

: **Table1**

DBDEMOS	<b>DBDEMOS</b>	<b>DataBaseName</b>
) ( )		

	<b>Customers.db</b>	<b>TableName</b>
True	<b>True</b>	<b>Active</b>

. Table1 DataSet DataSource1  
 . DataSource1 DataSource DBNavigator1 DBGrid1

: Detail 2

: Table2

DBDEMOS	<b>DBDEMOS</b>	<b>DataBaseName</b>
) ( )		
	<b>order.db</b>	<b>TableName</b>
True	<b>True</b>	<b>Active</b>

. Table2 DataSet DataSource2  
 . DataSource2 DataSource DBGrid2  
 Table2

. Table1  
 MasterField Datasouce1 MasterSource Table2  
 CustNo

:

Oracle

Borland Paradox

( Paradox )

Oracle 9i

Database Desktop

: DataBase Desktop

:

:

		<b>GoFrom</b>
		ArriveTo
		GoTime
		ArriveTime
		CardCount

<b>( Passengers )</b>		
	*	Pno
		Pname
		Nationality
		PassNo

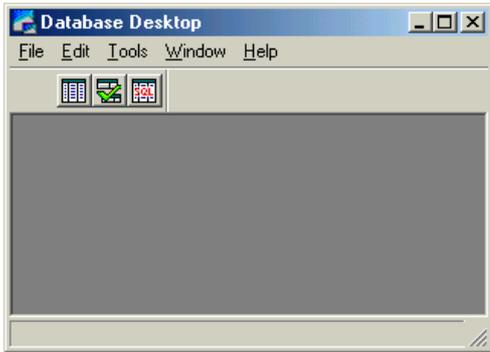
<b>TripsAndPassengers</b>		
		Pno
		TripNo
		SeatNo
		ClassNo

<b>( Trips )</b>		
	*	TripNo
		Company

( \* )

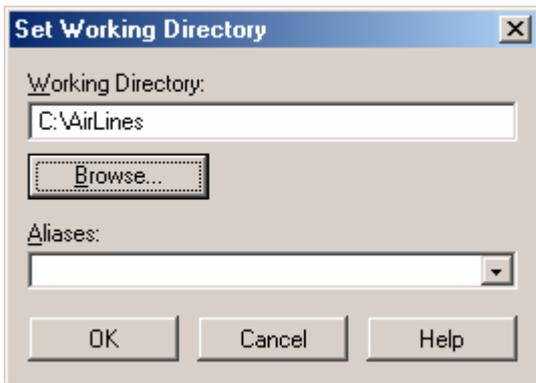
. 200 1

C AirLines 1  
: Database Desktop 2

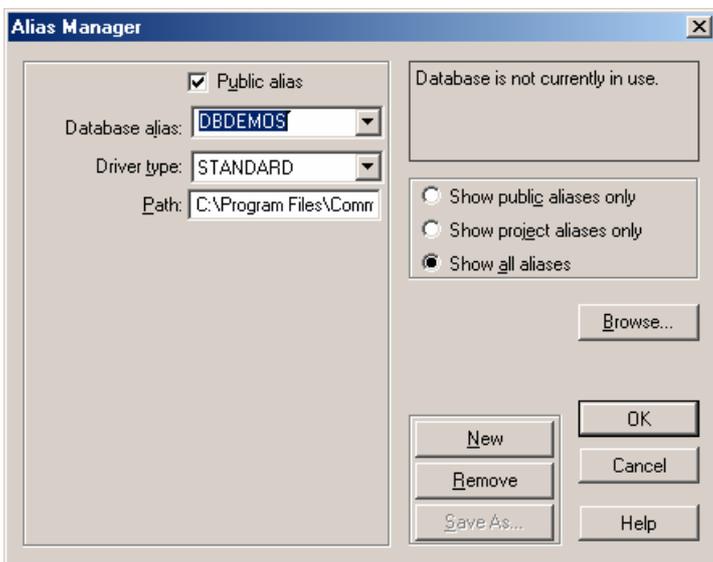


Start → Programs → Borland Delphi → Database Desktop  
Tools → Database Desktop

: 2



C:\ Browse File → Working Directory  
AirLines ok



: Alias 3  
Alias Manger C:\AirLines  
Database Desktop Tools  
Database New Alias  
( Travel )  
) STANDARD Driver Type

Standard

.(

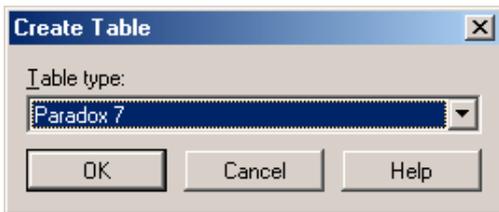
( Browse ) Path C:\AirLiens  
 Ok Keep New  
 Yes IDAPI32.CFG

C:\AirLiens Table DatabaseName

D:\1998 1998

Alias Public Alias Alias Manger  
 Alias Database Desktop  
 Remove

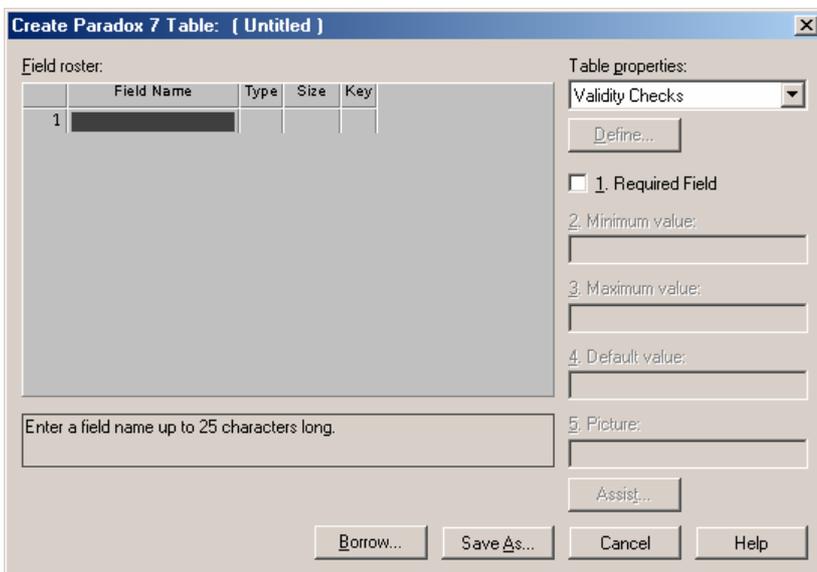
1  
2  
3  
4  
5



File → New → Table

) Database Desktop

Paradox7 (



Database

Desktop

: Field roster

: Field Name

1

SQL

... Date From SELECT SQL  
: Type 2

Space

Type

: Paradox

Type

	A	255 - 1	Alpha
	N		Number
	\$		Money
Integer	S		Short
Longint	I		Long Integer
)	#	0 .. 32	BCD
( <sup>(1)</sup>			
	D		Date
	T		Time
	@		TimeStamp
( <sup>(2)</sup> .	M	1..240	Memo
)	F	0.. 240	Formatted Memo
( <sup>(2)</sup> (..			
( <sup>(3)</sup>	G	0..240	Graphic
( <sup>(3)</sup> ( Excel )	O	0..240	OLE
False True	L		Logical
	+		Auto increment
( <sup>(3)</sup> .Mb	B	0..240	Binary
Db	Y	1..255	Byte

: ( 1 )

255

Memo

: ( 2 )

MB

30

30

).Db

30

.Mb

( 3 )

Size

3

20

A

Alpha

" "

: Key ( )

4

:

)

( ..

Null " "

:

Auto

. Increment

:

.Null " "

:



File → Open → Table

Passengers.db

:

Table → Restructure

Table properties

: **Validity Checks** 1

:

: Required Field 1

: Minimum 2

: Maximum 3

: Default Value 4

MaskEdit

: Picture 5

Assist

:

Trips

350 0

Table → Restructure

File → Open → table

Trips

Required

Company

Table Properties

Validity Checks

.Field

. 350

Maximum

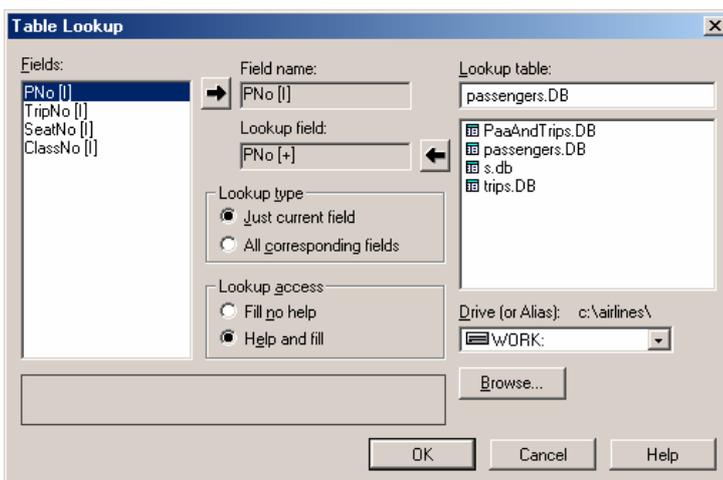
0

Minimum

CardNo

Save

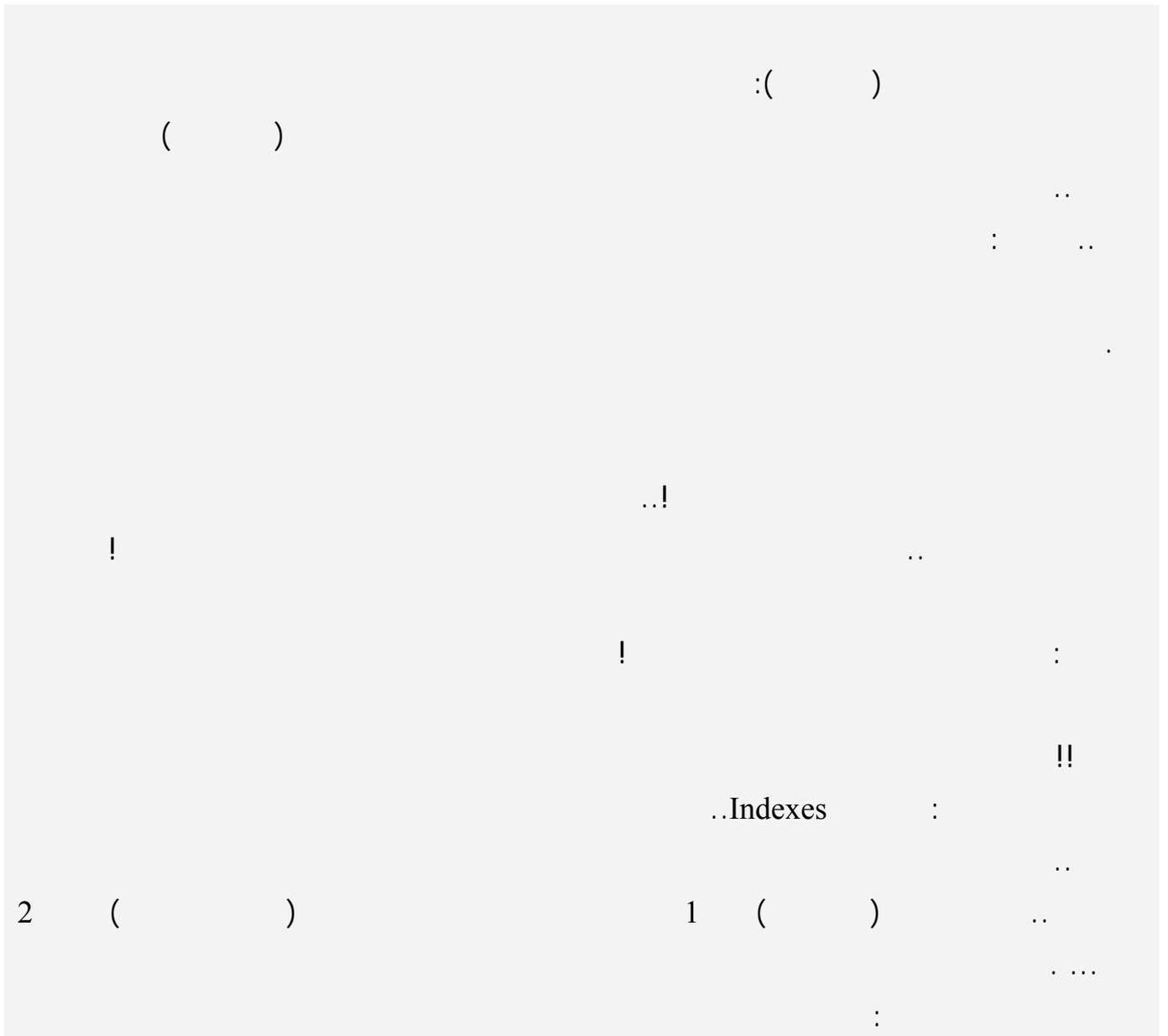
: **Table Lookup** 2

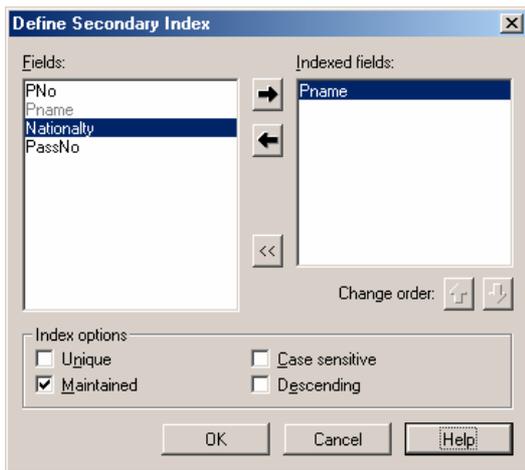
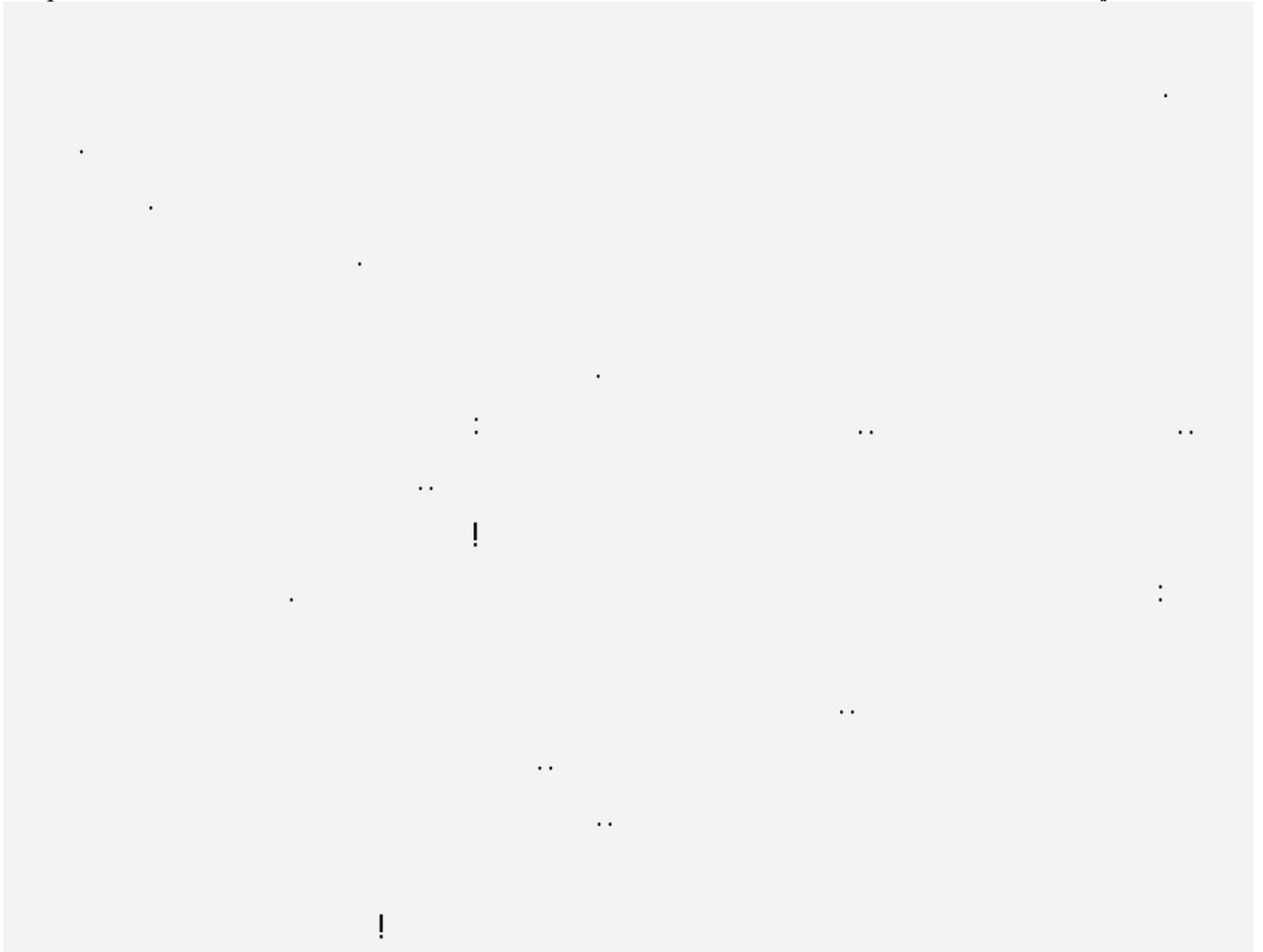


```

:
Table → Restructure                               PassAndTrips
Define                                             Table LookUp   PNo
Table Properties
. Ok      Passengers.db      Lookup Table
. Trips   TripNo
..
:Secondary index 3
)
. (

```





→

Table → Restructure

Secondary Index      Table Properties  
 :      Define  
                                  PName  
 Indexed Fields  
 : Index Option  
                                  : Unique      1  
 )  
 . (      : Maintained      2  
                                  : Case Sensitive      3  
                                  : Descending      4

. PNameIndex

Ok

:

. ( )

1

2

3

### : Referential Integrity

)

(

" " " " " "

:

Referential

Table → Restructure

PassAndTrips

: Define

Table Properties

Integrity

:

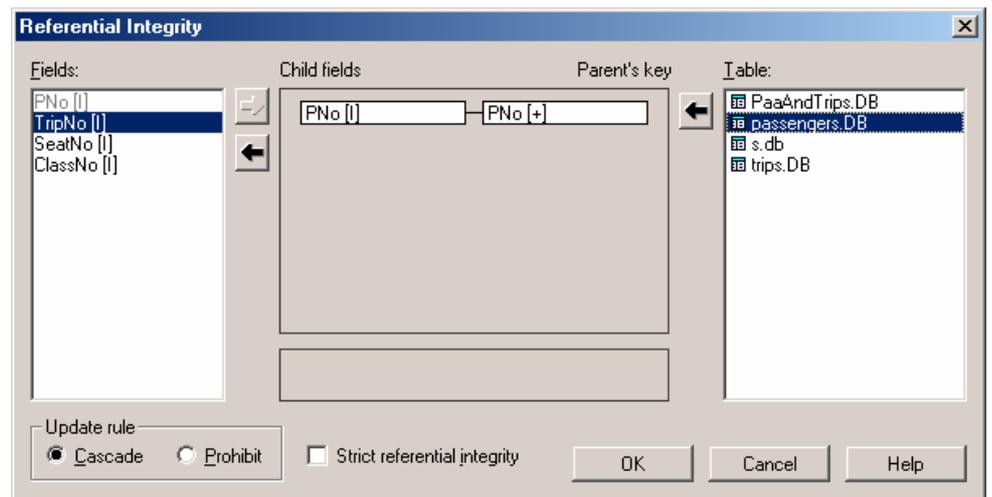
Table

→

PNo

←

Update Rule



: Cascade

1

)

" "

: Prohibit 2

. ( )

: Strict Referential Integrity 3

.Dos

Ok

...

:

Paradox

Prohibit 1

SQL

Cascade

2

"

"

:

5

Table

Table Security

Table → Restructure

1

Define

properties

:

Master Password

.Ok

Verify Master Password

. ( )

Auxiliary Password

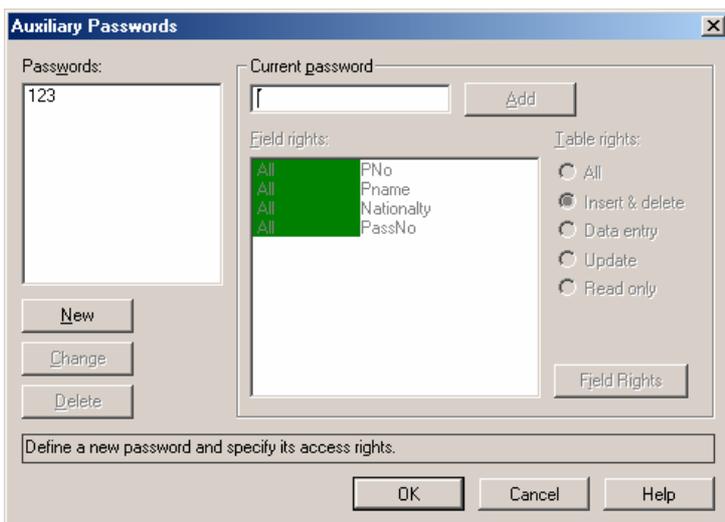
Current Password

Add

Table rights

Read Only

....



1

. Delete

Modify

:

Paradox

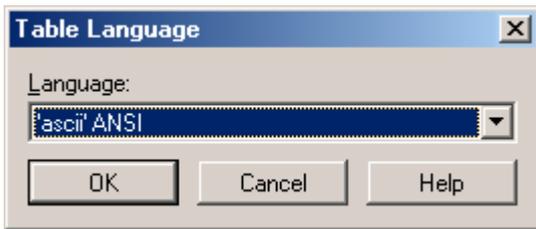
Oracle MySQL

. MS SQL Server

: **Table Language**

6

Table Language



. 'Ascii' ANSI

: Dependent Table

7

:

Dependent Table

( Passengers )

. ( PassAndTrips )

Table properties

:

Paradox

1

Dbase

....

Paradox

2

3

4

:

Database Desktop

Database Desktop

Change Edit → Preferences

Arabic Transparent

Edit

)

F9

Table

(

Table : passengers.DB				
Passengers	PNo	Pname	Nationality	PassNo
1	1	أحمد	سورية	1234455
2	2	فؤاد	السعودية	9875234
3	3	علي	مصر	456454

Tab

1

Table : trips.DB							
TripNo	Company	GoFrom	ArriveTo	GoTime	ArriveTime	CardCount	
1	السورية للطيران	دمشق	القاهرة	12:32:46 ٠٢/٠٩/٢٠	03:32:50 ٠٢/٠٩/٢٠	50	
2	الخطوط الإيطالية	نابا	حلب	12:33:40 ٠٢/٠٩/٢٠	12:33:43 ٠٢/٠٩/٢٠	40	
3	طيران الإمارات	دبي	لندن	12:34:23 ٠٢/٠٩/٢٠	12:34:24 ٠٢/٠٩/٢٠	30	

CardCount

400

(

)

TimeStamp

PNo

Table : PaaAndTrips.DB				
PaaAndTrips	PNo	TripNo	SeatNo	ClassNo
1	1	1	33	33
2	2	1	66	66
3	3	2	2	32

Ctrl + Space

PNO

Passengers.db

PNo

Key Violation

. Record

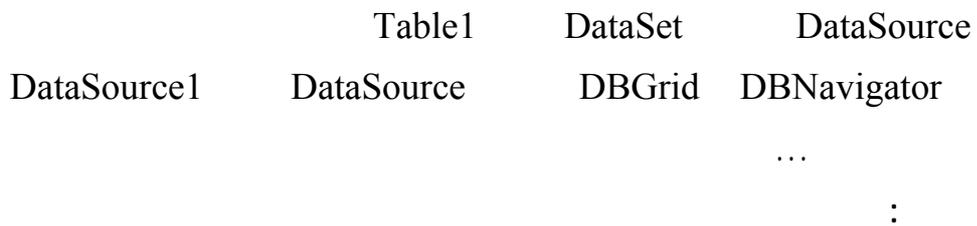
( )

### Database Desktop

. Table, DBGrid, DataSource, DBNavigator

Table1

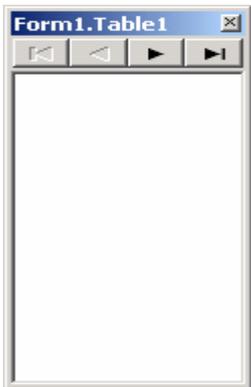
Travel	DatabaseName
Passengers	TableName
True	Active



Data Control

**:Tfield**

( Table )



Add

Table1

Tfield

All Field

. DBGrid  
PassNo

Pno 1  
2

. DBGrid

Delphi Type

```
Table1Pname: TStringField; //
Table1Nationalty: TStringField;
Table1PassNo: TIntegerField; //
```

: Tfield

PassNo

Table1Pname: TStringField

. Name

. DBGrid

taCenter

Alignment

3

.

"

DisplayLabel

4

:

:

: TFeild

:

: label1

:

Label1.Caption := Table1Pname.value ;

Label

Pname

...

Caption

Caption

Table1Pname

:

String

Label1.Caption := Tabel1PassNo.AsString ;

AsFloat AsInteger AsBoolean

TField

. AsDateTime

: FieldByName ( )

:

TableName.FeildByName('FieldName').Value

:

TableName.FeildByName('FieldName').AsType

:

: Label

: ( 1 )

:

label1.Caption := Table1.FieldByName('Pname').Value

:

Label2.Caption := table1.fieldbyname('PassNo').AsString ;

Variant

:

Table1['FieldName']

:

:

Label1.Caption := Table1['Pname'] ;

:

http://www.alshater.net

Label2.Caption := table1['PassNo'] ;

AsString

:

**TableName.Field[Index].Value**  
**.AsString**

:

Label1.Caption := Table1['Pname'] ;

:

Label2.Caption := table1.Fields[3].AsString ;

:

: ( ) 1

:

Table1.Edit ;

Table1.FieldName('FieldName').Value := NewValue ;

Table1.Post;

Database Desktop

. Table1.Edit

Table1.Post

:

Edit

:

Table1.Edit ;

Table1.FieldName('Pname').Value := Edit1.Text ;

Table1.FieldName('Nationalty').Value := Edit2.Text ;

Table1.FieldName('PassNo').AsString := Edit3.Text ;

Table1.Post ;

table1.FieldName('PassNo').AsString := edit3.Text ;

Table1.FieldName('PassNo').Value := strtoint( Edit3.Text) ;

DBGrid

:

DataSource

AutoEdit

False

) DataSoucre

Table1

(

```

Table1.insert ;
Table1.Fieldbyname('Pname').Value := Edit1.Text ;
Table1.FieldByName('Nationalty').Value := Edit2.Text ;
Table1.FieldByName('PassNo').AsString := Edit3.Text ;
Table1.Post ;
    
```

Table1.insert

```

Table1.Fieldbyname('Pname').Value := Edit1.Text ;
Table1.Field[0].Value := Table1['Pname'] := Edit1.Text ;
Table1.Field[1].Value := Edit1.Text ;
Table1.Field[2].Value := Edit1.Text ;
Table1.Field[3].Value := Edit1.Text ;
Table1.Field[4].Value := Edit1.Text ;
Table1.Field[5].Value := Edit1.Text ;
Table1.Field[6].Value := Edit1.Text ;
Table1.Field[7].Value := Edit1.Text ;
Table1.Field[8].Value := Edit1.Text ;
Table1.Field[9].Value := Edit1.Text ;
    
```

: Data Control

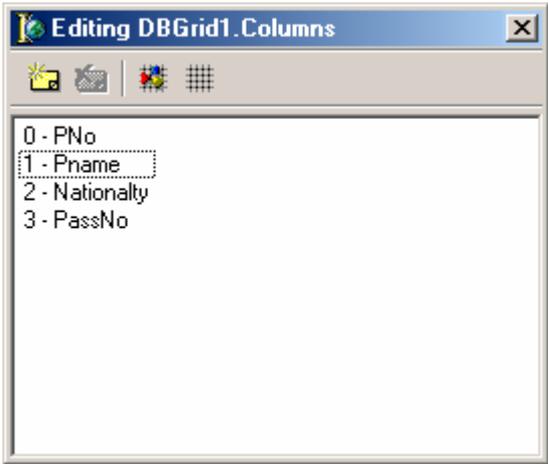
: DBGrid 1

	bdRightToLeft	BiDiMode
		Color
		FixedColor
		Font
		TitleFont

: Option

	True or False	dgEditing
	True or False	dgTitle
	True or False	dgIndicator
	True or False	dgCollLines
Tab	True or False	dgTabs
	True or False	dgRowSelect
	True or False	dgConfirmDelete

	True or False	dgMultiSelect
--	---------------	---------------



**Columns**

DBGrid

( Add All Field

Delete

DBGrid

Table

Data Control Table

		Alignment
		Color
)	(	Font
		Title-Alignment
(	)	Title-Caption
		Title-Font

PickList

String List

PickList

Nationality

Editor

Nationality

```
( Add New )
)
FieldName
.....
:
: Flat
: Hints
: VisibleButton
Label : DBtext 3
: DBEdit 4
.Memo : DBMemo 5
: DBImage 6
```

: Data Control

: DBImage 6

: ( DBImage DBMemo ) :

DBImage DBGrid Datasource Table :

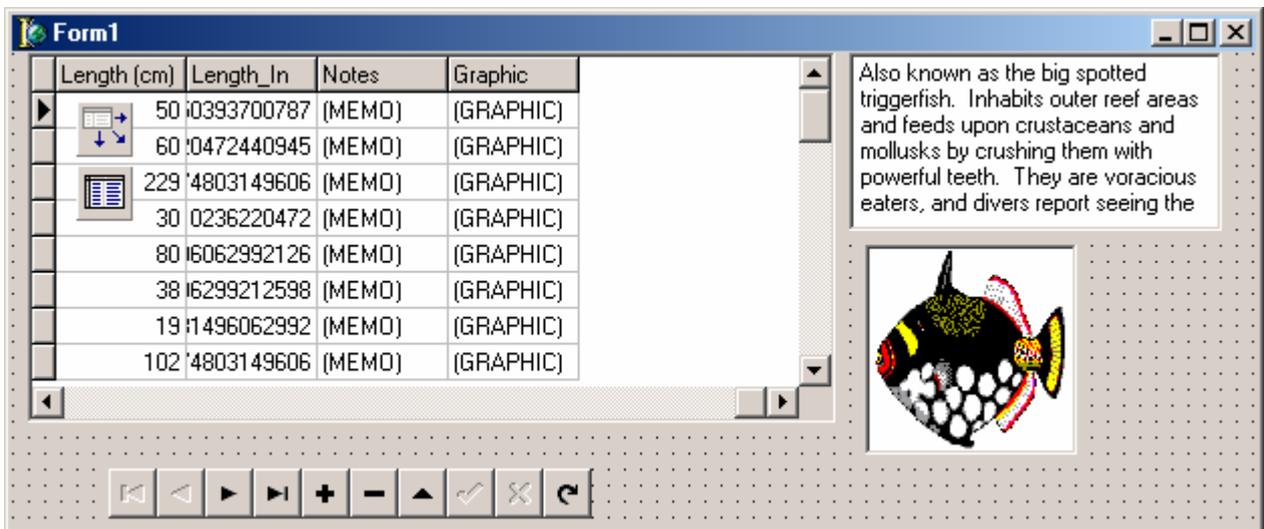
DBNavigator DBMemo

) biolife.db DBDemos Table1

DataSource DataSet True Active (

.. DataSource1 DataSource Table1

... Graphic DBImage1 Datafield Notes DBMemo1



DBGrid

Graphic Notes

DBMemo

: DBImage

: Graphic ( )

DBGrid

Insert Edit

DBMemo

Clipboard

DBImage

DbImage

1

DBImage1.PasteFromClipboard

Ctrl+v

OpenPictureDialog 2

) OpenPictureDialog

: ( Jpg Jpeg

```

If OpenPictureDialog1.Execute then Begin
DBImage1.Picture.LoadFromFile(OpenPictureDialog1.FileName );
DBImage1.CopyToClipboard ;
DBImage1.PasteFromClipboard ;
end;

```

DBImage1

DataSource DBImage 3

```

Table1.edit;
If OpenPictureDialog1.Execute then
Table1Graphic.LoadFromFile(OpenPictureDialog1.FileName);
Table1.Post ;

```

Jpg 1

Bmp Jpg Bmp

Bmp 2

Jpg Binary

: DBListBox 7

: DBComboBox 8

: DBDateTimePiker 9

TimeStamp Time Date

Kind

: ( DBcomboBox DBlistBox ) :

DBedit DataSource Table  
 . DBNavigator DBDateTimePiker DBComboBox DBListBox



Trips Travel Table1  
 . True Active  
 Table1 DataSource1  
 Datasource1 . DataSource

Datafield TripNo DBedit1  
 ) True ReadOnly

..... Company DBedit2

: Items GoFrom DBListBox1

: Items ArriveTo ComboBox1

...

) dtkTime Kind GoTime DBDateTimePiker1

. ( Timestamp GoTime

:

. DbListBox1 ComboBox1 1

. DBListBox1 GoFrom 2

DBComboBox1 ArriveTo 3

... DbGrid 4

. Logical : DBCheckBox 10

: DBRadioGroup 11

:

:

DataSource DBRadioGroup DBListBox

: Items GoFrom DataField Datasource1

..

```

        ...
        Values
        Items
        ..
Item          DBListBox          : DBLookupListBox    _ 12
.
Item          DBComboBox          : DBLookupComboBox    13
.
PassAndTrip "
                "
                DBLookupListBox
                DBLookupComboBox
.
        DBedit          DataSource          Table
. DBGrid          DBLookupComboBox          DBLookupListBox          DBNavigator
.   DataSource1          Travel          PassAndTrip          Table1
.   DataSource2          Travel          Passengers          Table2
.   DataSource3          Travel          Trips          Table1
.   . True          Active
.   DataSource1          Datasource
.   :          DBLookupListbox1
.   "          "          Pno          : "PNo"          DataField
.   : DataSource2          Listsource
.   . Passengers
.   : Pname          ListField
.   . Passengers
PassAndTrip          : PNo          KeyField
                KeyField
.   . DataFields
.   :          DBLookupComboBox1
.   "          TripNo          : "TripNo"          DataField
.   .

```

```

: DataSource3      Listsource
                    .Trips
: Company         ListField
                    . Trips
PassAndTrip       :TripNo      KeyField
                    .
                    . ClassNo    DBEdit2      SeatNo      Dbedit1
                    .
                    ....
                    +
                    ...
Memo             : DBRichEdit      14
                    Formatted Memo
                    : DBCtrlGrid      15
                    .
                    :
DataSource2       DataSource
                    .
                    Pname      DataField      DBedit
                    .
                    : DBChart      16

```

```

:
( )
.
: Locate
:
:
Locate ( 'FieldName',SearchValue,Option ) ;
: FieldName
: SearchValue
: Option
Option = [loCaseInsensitive] ,
Option = [ loPartiaKey ] ; " " " "
" "
Option = [ loCaseInsensitive , loPartiaKey ];
Option = [ ];
False True
:

```

```

Edit Button DbGrid DataSorce Table
: DBGrid Travel Passengers
:

```

```

If Table1.Locate('Pname',Edit1.Text , [locaseinsensitive,lopartialkey]) Then
Showmessage(' The record is found ') Else
Showmessage ( ' There is no match , Try Another Value ');
. PName Edit1
" " )
loPartialKey ( " "
.

```

( ahmed Ahmed )

.... loCaseInsensitive

: Locate

( )

: Locate

Locate ( 'FieldName1; FieldName2; FieldName3',VarArrayOf ( [SearchValue1, SearchValue2, SearchValue3]),Option ) ;

: Edit2 :

```
if table1.Locate('pname;Nationalty',vararrayof([ edit1.Text,Edit2.text]) , [
locaseinsensitive , lopartialkey ] ) then
Showmessage('the record is found') else
Showmessage ( 'there is no match , Try Anther Value' );
```

. Variant VarArrayOf

:

SearchValue Long Integer Short

:

```
if table1.Locate('PNo;Nationalty',vararrayof([ strtoint(edit1.Text),Edit2.text])
,[locaseinsensitive,lopartialkey]) then
Showmessage('the record is found') else
Showmessage ( 'there is no match , Try Anther Value' );
```

**: Lookup 2**

:

:

:

var LookupResult : Variant;

begin

lookupResult := Table1.Lookup('Pno',strtoint(edit1.Text ),'pname;Nationalty');

if Not VarIsNull( lookupResult) then

Showmessage(vartostr(lookupresult[0]) + ' ' + vartostr(lookupresult[1] ) );

Variant Edit1

VarIsNull Null Lookup

. Variant

```

variant
VarToStr
:
Lookup 1
:
lookupResult := Table1.Lookup('Pno;Pname',VarArrayOf
([strtoint(edit1.Text),Edit2.text]),'PName;Nationalty');
lookup Locate 2
)
(
: FindKey
Findkey
:
:
If not Table1.FindKey( [ Strtoint ( edit1.text)]) Then
Showmessage ( 'the Record is not Found');
( ) PNo
True Edit
False
Table IndexName
) PNameIndex IndexName Table1
DbGrid ( Database Desktop
. PName
:
If not Table1.FindKey([edit1.text]) then
Showmessage ( 'the Record is not Found');
.....
: FindKey
TableName.FindKey ( [ SearchValue1,SearchValue2 ,...,SearchValue3]) ;
Table1.FindKey( [2,3]) : " " :
. 4 2

```

```

( False True )
:
:
Table1.FindNearest ([edit1.text]);
" "
Edit1
" " " " " " " " " "
: Filter ( )
.
. True Filter Table Filter
:
...
Button DBGrid DataSource Table
. DBGrid1 Trips
: Filter True Table1 Filtered
GoFrom = ' '
. False Filtered
Filter
GoFrom = ' ' and Arriveto = ' '
( True Filter )
: ...
(GoFrom = ' ' Or GoFrom = ' ') and Arriveto = ' '
" "
GoFrom = ' *'
: Filter : 10
CardCount > 10

```

```

:
True   Filtered
:      10

```

```
Table1.Filter := ' CardCount > 10 '
```

```
      :      Edit
```

```
Table1.Filter := ' CardCount > '+ edit1.Text ;
```

```
      ...      Edit1
```

```
      :
```

```
Table1.Filter := 'GoFrom = '+ Quotedstr(edit1.Text) ;
```

```
      ) = '      '      Quotedstr
```

```
      Quotedstr (
```

```
      ...
```

```
      : Table
```

```
      :
```

```
      Table
```

```
Table1.Active := true
```

```
Table1.open
```

```
: Open
```

```
1
```

```
.
```

```
Table1.Active :=
```

```
Table1.Close
```

```
: Close
```

```
2
```

```
. False
```

```
      .      Table1.First      : First      3
```

```
      .      Table1.Last      : Last      4
```

```
      .      Table1.Next      : Next      5
```

```
      .      Table1.Prior      : Prior      6
```

```
      )      Table1.MoveBy( 5 )      : MoveBy( x)      7
```

```
      .(      X
```

```
      .      True      : Bof      8
```

```
      .      True      : Eof      9
```

```
      .      : RecordCount      10
```

```
      .      : RecNo      11
```

```
      ..      : Delete      12
```

```
      :
```

:

:DataBase Desktop

1

: Writer

1

Wadress	WName	* Wno
		1
		2

: Publisher

2

PubAdr	PubName	* PubNo

:

3

Edate	PubNo	WNo	Book	BookNo

2

3

4

5

6

:

)

.... (

350

:

= 350 -

CardCount

: DBGrid DataSource Table

DBGrid

Trips

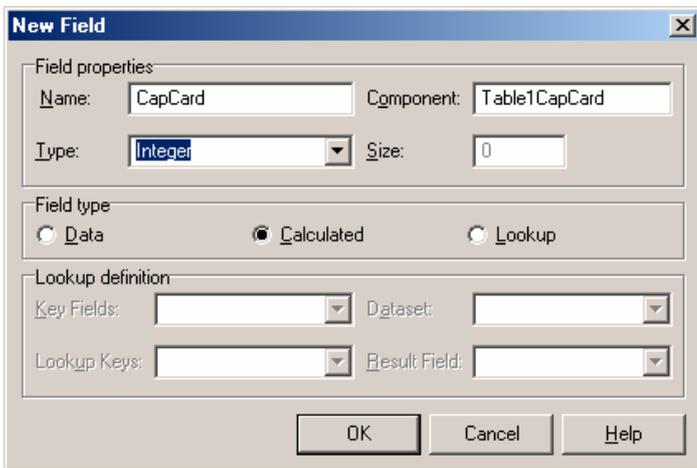
...

. False

Table1

Active

Table



New field

Type

Name

CapCard

Field type

Calculated

Integer

. Ok

Event

Table1

:

OnClacFields

Table1CapCard.Value := 350 - table1Cardcount.value ;

CapCard

Table1

True

Active

... CapCard

CardCount

)

: 2

(" "

15/9/2003

False

Table1

Active

GoTime

OK

String

Type

TheDay

Name

:

OnClacFields

Case DayOfWeek ( Table1GoTime.AsDateTime ) of

1: Table1TheDay.Value := ' ' ;

ملاحظة :

. Table

```

2: Table1TheDay.Value := '  ';
3: Table1TheDay.Value := '  ';
4: Table1TheDay.Value := '  ';
5: Table1TheDay.Value := '  ';
6: Table1TheDay.Value := '  ';
7: Table1TheDay.Value := '  ';
end;

```

..... DayOfWeek  
..... GoTime

**SQL ( Structured Query Language )**

GoTime

SQL :

: SQL  
: : Select

```

Select FieldName1 , FieldName2 , FieldName3....
From TableName1,TableName2 ...
[ Where Condition ]
[ Group By FieldName1,...]
[ Order By FieldName ]

```

[ ]

From Select

:

```

Select PName , Nationality
From Passengers

```

BDE

Query

SQL

TableName

Table

. SQL

SQL

SQL

:

```

DBNavigator DBGrid DataSource Query

```

```

SQL ... Travel Query1 DataBaseName

```

:

```

Select PName , Nationality
From Passengers

```

) True Active

(

DBNavigator1 DBGrid1 Query1 DataSource1 DataSet  
. DataSource1

DBGrid Select

DBNavigator1

Select DBGrid1

Query

SQL

True

RequestLive

. Table Query

Select \* : 2

: SQL )

Select \*

From Passengers

False

Query

Active

SQL

Select Where : Where

. 5 : 3

: SQL

Select \*

From Passengers

Where PNo > 5

: 3 : 4

Select \*

From Passengers

Where PNo = 3

: 5 2 : 5

Select \*

From Passengers

Where PNo Between 2 and 5 ;

: 5 - 2 : 6

Select \*

From Passengers

Where PNo Not Between 2 and 5 ;

: : 7

Select \*



: **Sum** 2

: SQL

: 13

Select Sum(CardCount)  
From Trips  
Where GoFrom = ' ' .

: **Avg** 3

: 14

Select Avg(CardCount)  
Form Trips

: **Max** 4

: 15

CardCount

Select Max(CardCount)  
From Trips

: **Min** 5

: **Group By**

Select

:

:

: 16

Select GoFrom ,Count(GoFrom)  
From Trips  
Group by GoFrom

:

: 17

Select GoFrom ,Sum(CardCount)  
From Trips  
Group by GoFrom

Group By

Select

:

: **Having**

Group By

Having

. 10

: 18

Select GoFrom ,Sum(CardCount)  
From Trips  
Group by GoFrom  
Having Sum( CardCount) > 10

Null

: 19

Select GoFrom ,Sum(CardCount)

<http://www.alshater.net>

From Trips

Group by GoFrom

Having Sum( CardCount ) is not null

```

Where
    . Table
    : PassAndTrips Passengers :1
SELECT Pname, TripNo, SeatNo, ClassNo
FROM PassAndtrips, Passengers
WHERE PassAndtrips.PNo = Passengers.PNo

```

```

" "
)
Passengers.PNo
: Trips Passengers PassAndTrips : 2
:
SELECT Pname, Company, GoFrom, SeatNo, ClassNo
FROM Passandtrips, Passengers, Trips
WHERE (PassAndtrips.PNo = Passengers.PNo)
AND (PassAndtrips.TripNo = Trips.TripNo)

```

: Inner join

```

: SQL
SELECT Pname, TripNo, SeatNo, ClassNo
FROM PassAndtrips
INNER JOIN Passengers
ON (Passengers.PNo = PassAndtrips.PNo)

```

: SQL

```

SELECT Pname, company, SeatNo, ClassNo
FROM Passandtrips
INNER JOIN Passengers
ON (Passengers.PNo = Passandtrips.PNo)
INNER JOIN Trips
ON (Trips.TripNo = Passandtrips.TripNo)

```

:

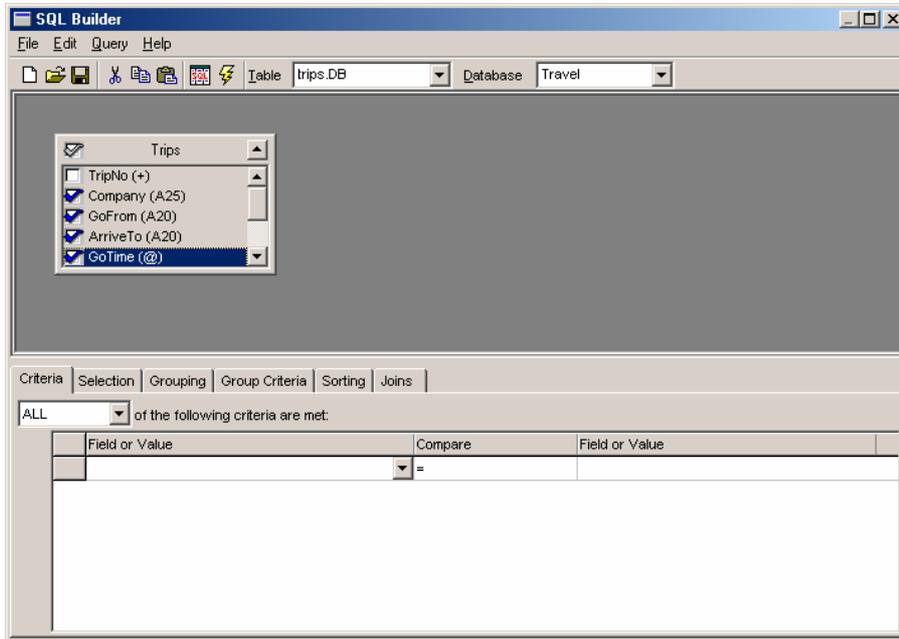
SQL Right Join Left Join Outer Join 1

: SQL SELECT 1

	Create Table

	Insert
	Update
	Delete From

.... SQL



: SQL Builder

SQL

SQL

...

SQL Builder

Query

SQL Builder

:

: 1

Travel

Database

1

Trips.db

Table

2

. (

)



Execute SQL

3

SQL

SQL Builder

4

..

Query

SQL

: SQL Builder

Where

: 2

:

... SQL Builder 1

) Trips.db 2

. (

= Field Value Trips.Gofrom : ( ) Criteria 3

. ( ) Field Value Compare

... SQL 4

. : 3

Compare = Trips.ArriveTo 1

. ( )

Selection SQL Builder :

) ( Field ) Trip

) ( ) ( Output Name

( Query DBGrid

. SQL

:

SQL Builder Order By

Sorting

( Sorted by ) Add

Sorted By ( )

.... Z →A A→Z

:Group by ...Having

. Group Criteria Grouping Having Group by

: SQL Builder

:

( Query ) SQL Builder

Passenegers Table PassAndTrips Travel

:

Passengers PNo

PassAndTrips PNo

) PNo

. ( SQL

Trips Table Trips :

... TripNo  
:

( )

Where GoFrom = '

...

ParamName Where GoFrom = :ParamName

Query

:

:

DBGrid

DataSource

Query

Button

Edit

Query1

SQL

...

SELECT Company, TripNo, GoFrom, ArriveTo, GoTime, ArriveTime, CardCount  
FROM Trips

Where GoFrom =:CityName

)

Query1

CityName

. ( Button1

Edit Query1.Params

...

Query1

Params

Data Type

CityName

. ftString

:

Button1

query1.Close;

query1.ParamByName('cityName').Value := edit1.Text;

query1.Open

( ...

)

Edit1

: 2

:

SELECT Company, TripNo, GoFrom, ArriveTo, GoTime, ArriveTime, CardCount  
FROM Trips

http://www.alshater.net

Where TripNo =: TripNumber ;

. ftInteger      DataType                      TripNumber                      Edit Query1.Params

:

query1.Close;

query1.ParamByName('TripNumber').Value := strtoint (edit1.Text) ;

query1.Open ;

:

SQL

Parameter

SQL Builder

SQL Builder

: Query

Locate )      Query

Table

FindKey

Query

( .... First Eof Bof Lookup

..

Query

FindNearest

:

:      **Employees**

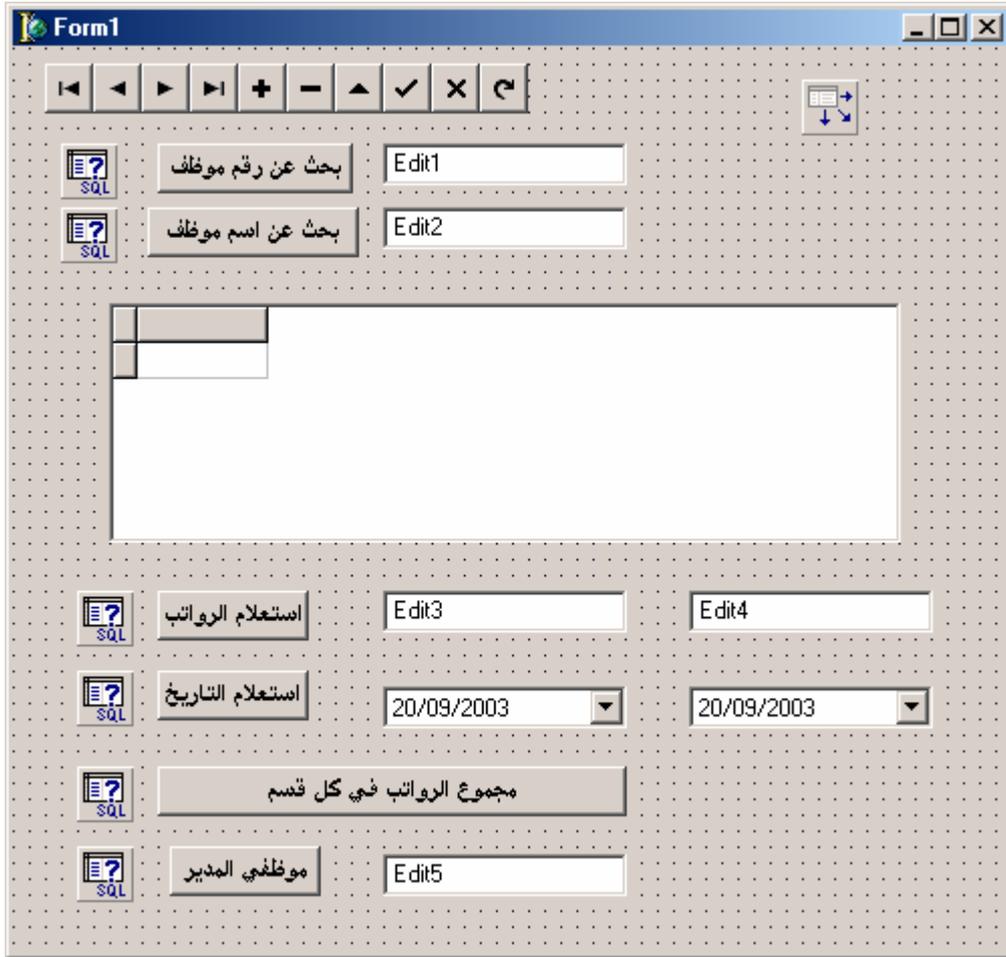
**Company**

Salary	Hiredate	Department_id	ManagerNo	EmpName	EmpNo
<b>9000</b>	<b>10/1/2002</b>	<b>3</b>	<b>200</b>	<b>Sara</b>	<b>10</b>
<b>12500</b>	<b>06/08/2000</b>	<b>2</b>	<b>300</b>	<b>kala</b>	<b>16</b>
<b>11000</b>	<b>09/01/2001</b>	<b>3</b>	<b>100</b>	<b>Dani</b>	<b>20</b>
<b>14000</b>	<b>05/07/2000</b>	<b>2</b>	<b>100</b>	<b>Wleed</b>	<b>30</b>

:

**Database Desktop**

:



DataSource	DataSource	DBNavigator	DBGrid	Query
	:	SQL		Query
QryEmpNo	Query1	Name	:	1
			: SQL	
Select * from employees Where EmpNo = : No				
QryEmpName	Query2	Name	:	2
			: SQL	
Select * from employees Where EmpName =:name				
Query3	Name	(	) :	3
				... QrySal
Select * from Employees Where salary between :mn and :mx				
QryHireDate	Query4	Name	:	4
Select * from Employees Where hiredate between :b and :e				
Query5	Name	:		5
				QrysumsalaryByDepartment
Select Department_id ,sum(salary ) form employees				
Group by DepartMent_id				

Query6 Name :

6

QryManager:

Select Empname From employees Where managerNo = :mno

:

( )

1

QryEmpNo.Close;

DataSource1.DataSet := QryEmpNo ;

QryEmpNo.ParamByName ( 'No' ) .value := Strtoint ( Edit1.text ) ;

QryEmpNo.Open;

: ( )

2

QryEmpName.Close ;

DataSource1.DataSat := QryEmpName ;

QryEmpName.ParamsByName ( 'Name' ).Value := Edit2.text ;

QryEmpName.Open ;

( )

3

QrySal.Close ;

DataSource1.DataSat := QrySal ;

QrySal.ParamByName( ' mn' ) .Value := strtoint ( edit3.text ) ;

QrySal.ParamByName( ' mx' ) .Value := strtoint ( edit4.text ) ;

QrySal.Open ;

: ( )

4

QryHireDate.Close ;

DataSource1.DataSat := QryHireDate;

QryHireDate.ParamByName ( 'b' ).asdate := datettimepicker1.date;

QryHireDate.ParamByName ( 'e' ).asdate := datettimepicker2.date;

QryHireDate.Open ;

: ( )

5

QrysumsalaryByDepartment.Close ;

DataSource1.DataSat := QrysumsalaryByDepartment;

QrysumsalaryByDepartment.Open ;

: ( )

6

QryManager.Close ;

DataSource1.DataSat := QryManager;

QryManager.ParamByName ( 'mno' ).Value := strtoint ( Edit5.text ) ;

QryManager.Open ;

While not QryManager.eof Do

Begin

Showmessage (QryManager.fieldByName ('EmpName').Value ) ;

QryManager.Next ;

End;

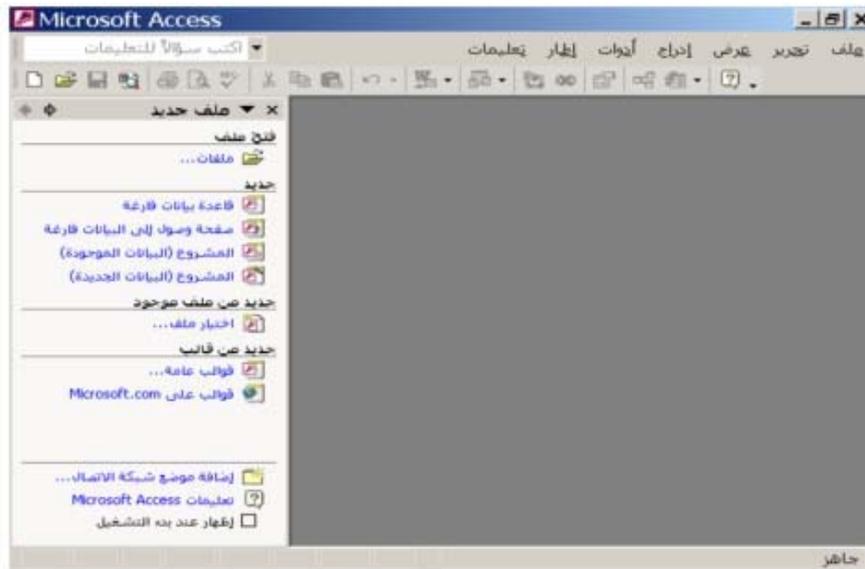
Ok

:Access

office 2003 - (Microsoft Office XP ) Access XP

New File " " ..New " " File " " -

:



" " " " " " " " " "

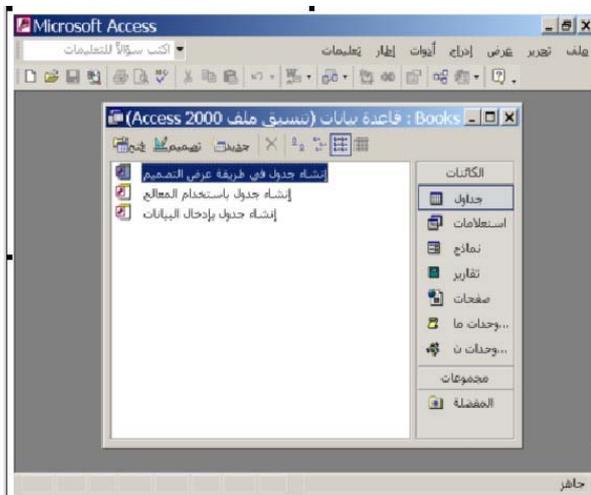
"Books.mdb"

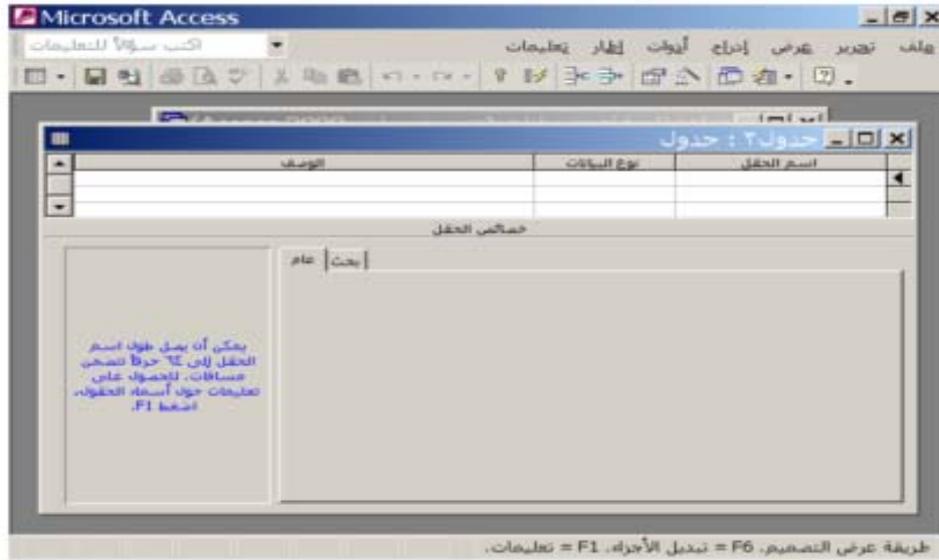
..

.Mdb

....

Access 97 Access 2000 Access XP





		ID
		Author

ID

Indexed "

Author

20

50

30

Authors

Ctrl+S

.OK

VB

Authors

	1
	2
	3
	4
	5
	6
	7
	8
	9

		ID
		Book
		AuthorID

Books

AuthorID	Book	ID
1		1
1		2
1		3
2		4
2		5
2		6
3		7
4		8
4		9

5		10
5		11
5		12
6		13
6		14
6		15
7		16
8		17
9		18

:

Referential

:

Integration

"

"

..Relationships "

"

Tools

:

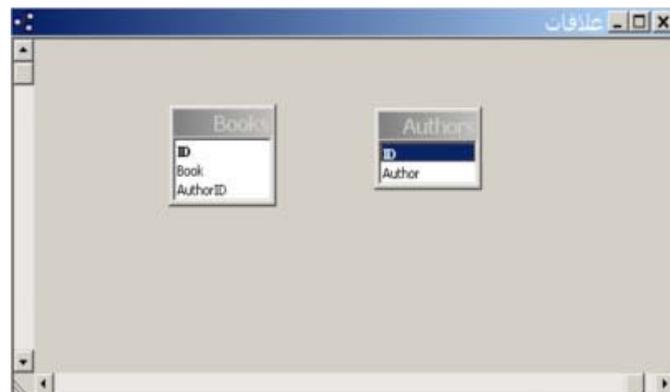


..

..

"

:



AuthorID

ID



Enforce Referential Integrity

Integrity

Cascade Update Related

:Fields

AuthorID

10 1 ( )

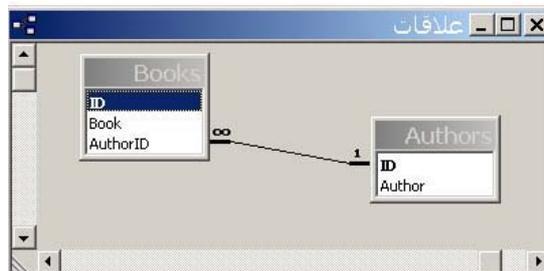
.10

ID

:Cascade Delete Related Fields

( )

( )



" "

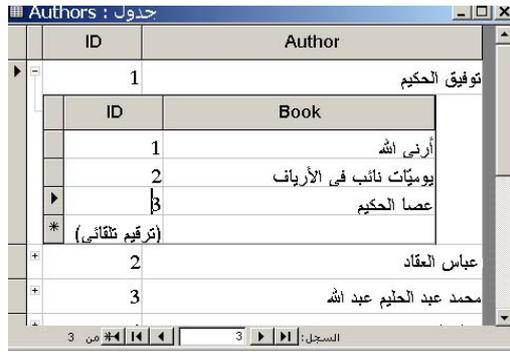
"+"

"-"

"+"

..( )

"-"



AuthorID

( )

:

**BDE**

Paradox

DataBaseName

Table

Database

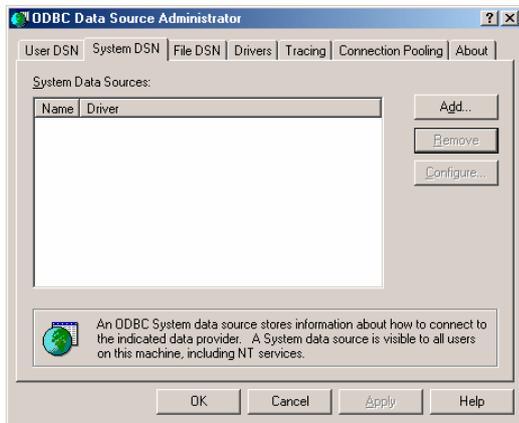
Alias

Desktop

Table

1

Administrative Tools → ODBC Data Sources



**System DNS**

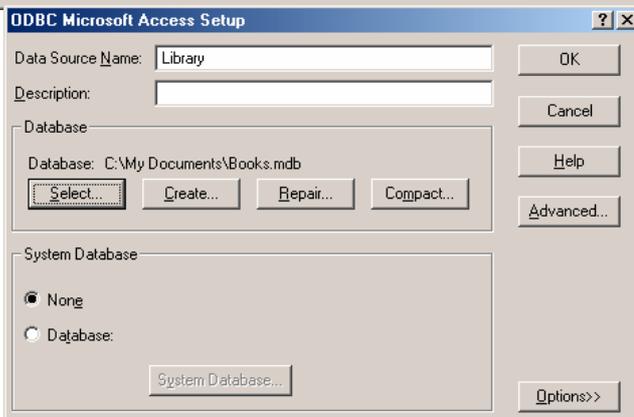
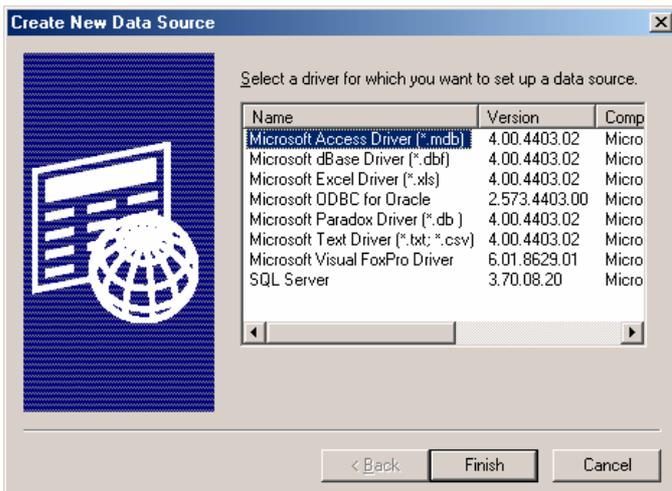
:

**Add**

2

Microsoft Access Driver ( \*.mdb)

. Finish



Data

Library

Source Name

3

( Books.mdb )

Select

Ok

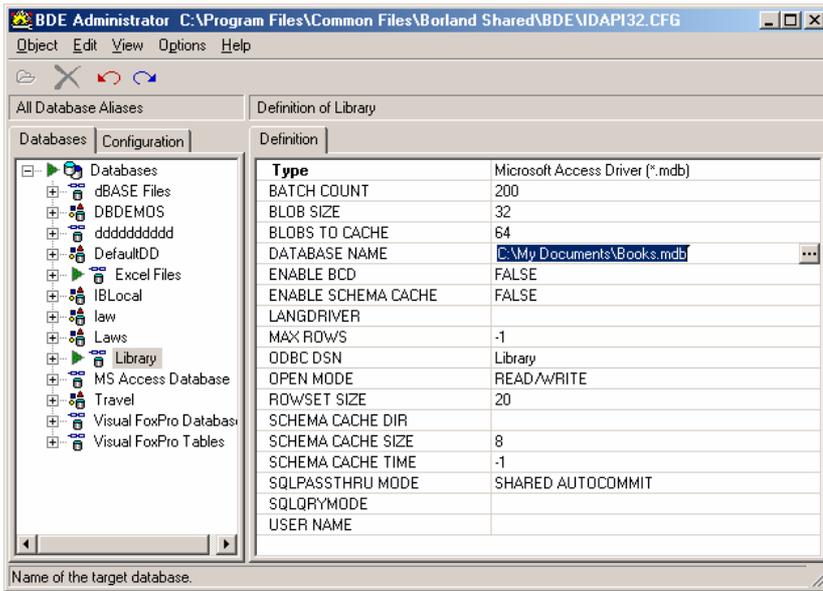
. ODBC Data Source

BDE Administrator

4

Start → Program → Borland Delphi → BDE Administrator

Alias



Library

Database

Definition

Database Name

Books.mdb

...

BDE Administrator

Yes

Query Table

Library

5

New

Paradox

Alias

Standard

Object

Borland

: ADO

BDE

ADO

SQL Server Oracle

: ADO

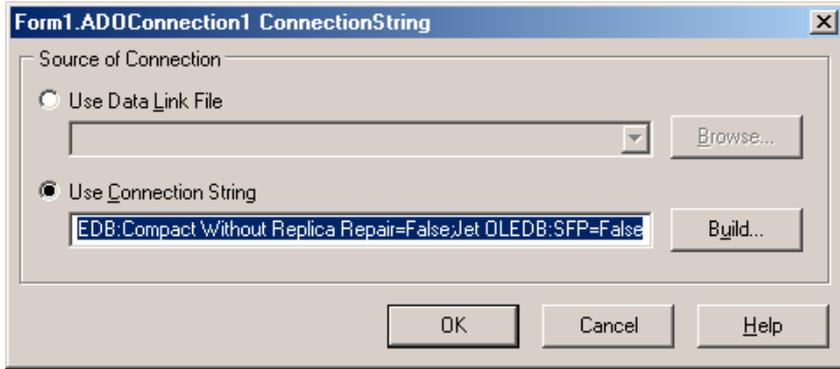
:

DataSource

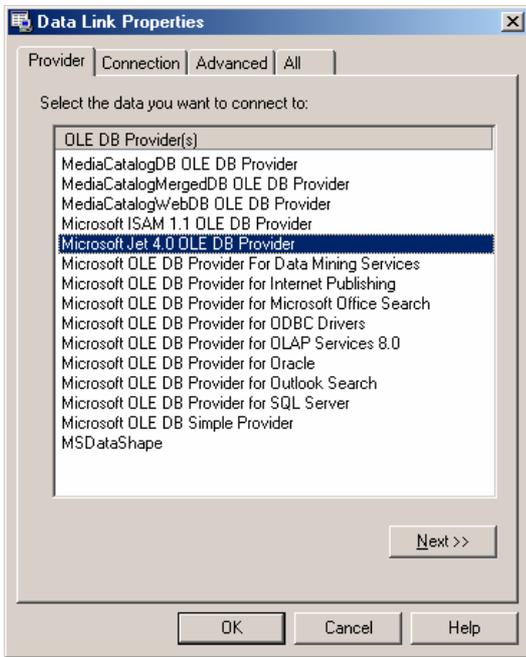
ADO

ADOTable ADOConnection

. DBNavigator DBGrid



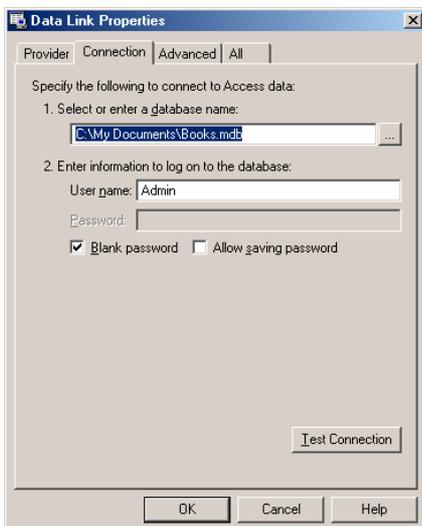
: ADOConnection  
 Use Connection String  
 Build  
 :



Microsoft Jet 4.0 OLE Db Provider

. Next

Oracle :  
 Microsoft OLE DB Provider for Oracle



Connection

Next

Select Or Enter Database Name

Ok

```

: ADOTable1
Authors      TableName      ADOConnection1      Connection
              True      Active
              ADOTable1      DataSource      DataSet
              . DataSource1      DBNavigator1      DBGrid1      Datasource
              .
              ADO      SQL      SQLConnection
              .      Query      Table

```

:  
: 1

...

ss	City	Country	Web	Email	Fax	Mobil	WPhon	HPhon	LName	FName	Num
)	A(15)	A(15)	A(40)	A(40)	A(15)	A(15)	A(15)	A(15)	A(15)	A(15)	+

Num

.

:

Data C MyPhon 1

) Data Data

. Paradox

BDE C:\MyPhon\Data Myphon Alias 2

. Database Desktop Administrator

Paradox Database Desktop 3

:

Define Table properties Secondary Indexes

Ok Lname Fname

. FNameIndex

.... FName Lname Define

. LNameIndex

MyPhon Alias Phonebook 4

. C:\MyPhon\Data

:

: 2

)

(

)

(

:

)

:

. (

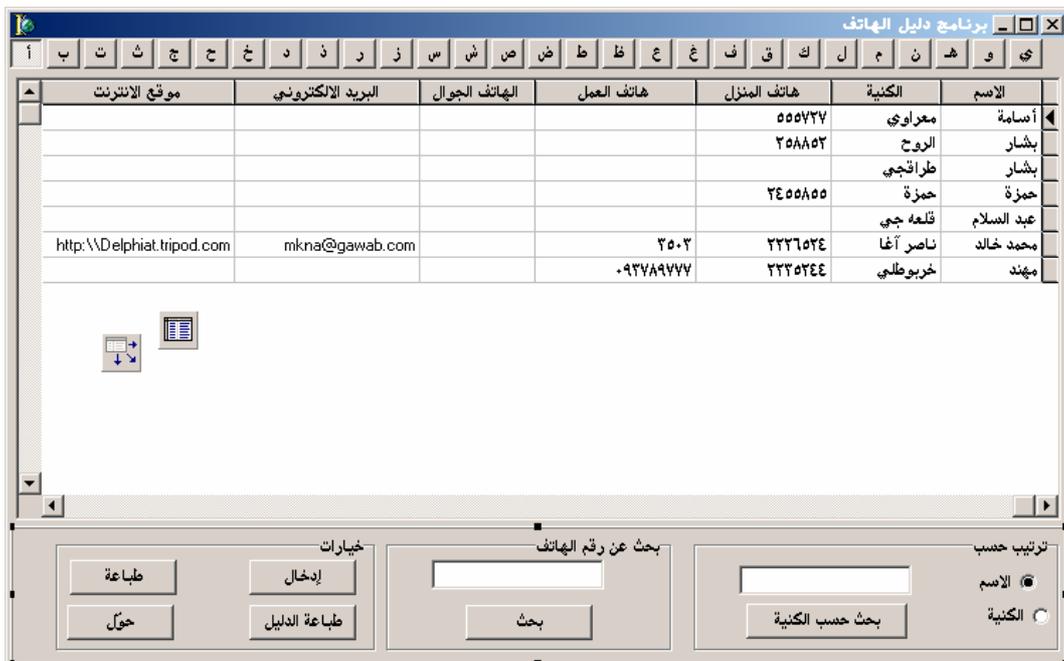
:

Memo

:

Memo

Alpha



:

: 1

bdRightToLeft	BiDiMode
	Caption
470	Hieght
750	Width
poScreenCenter	Position

: Win32 TabControl 2

alTop	Align
True	MultiLine
tsButtons	Style
	Tabs
True	HotTrack

: Standard Panel 3

alClient	Align
bvLowered	BevelInner
bvRaised	BevelOuter
"	Caption

: Table 4

MyPhone	DatabaseName
Phonebook	TableName
FnameIndex	IndexName
True	Active
Num	DisplayLabel

: Tabcontrol : DataSource 5

Table1	Dataset
--------	---------

: DbGrid 6

alClient	Align
DataSource1	DataSource
+ Titel	taCenter Aligment

: Panel : GroupBox 7

	Caption
--	---------

GroupBox1 : RadioButton1 8

	Caption
True	Checked
RBTName	Name

GroupBox1 : RadioButton2 9

	Caption
RBTLname	Name

: GroupBox1 : Edit1 10

"	Text
---	------

GroupBox1 : Button 11

	Caption
BtnSearch	Name

:

: RBTName

table1.IndexName := 'FnameIndex';

btnSearch.Caption := ' ';

: RBTLname

table1.IndexName := 'LnameIndex';

btnSearch.Caption := ' ';

Tabcontrol

Tabcontrol1 OnCahnge

:

if RBTName.Checked then

table1.Filter := 'fname = ' + quotedstr( tabcontrol1.Tabs[tabcontrol1.tabindex]+ '\*') else

table1.Filter := 'Lname = ' + quotedstr( tabcontrol1.Tabs[tabcontrol1.tabindex]+ '\*')

...

:

( )

Edit1

: BtnSearch

Filter

```

table1.Filtered := false;
table1.FindNearest([edit1.text]);

```

.....

:

WPhon

HPhon

Mobil

:

: Panel

: GroupBox

1

	Caption
--	---------

Edit2

2

"	Text
---	------

: Button

3

	Caption
BtnPhSearch	Name

:

```

Table1.Filtered := false;
if not Table1.Locate('HPhon',edit2.text,[]) then
if not Table1.Locate('WPhon',edit2.text,[]) then
if not Table1.Locate('Mobil',edit2.text,[]) then
showmessage(' ');

```

....

Main.pas

C:\MyPhon

:

. MyPhone



:

: Panel

: GroupBox

	Caption
--	---------

Caption Button

Data control

:

Memo

DBGrid

. ( ReadOnly DBGrid ) DBGrid

:

bdRightToLeft	BiDiMode
	Caption
poScreenCenter	Position
DataEnter	Name

Table1

Uses

Main

:

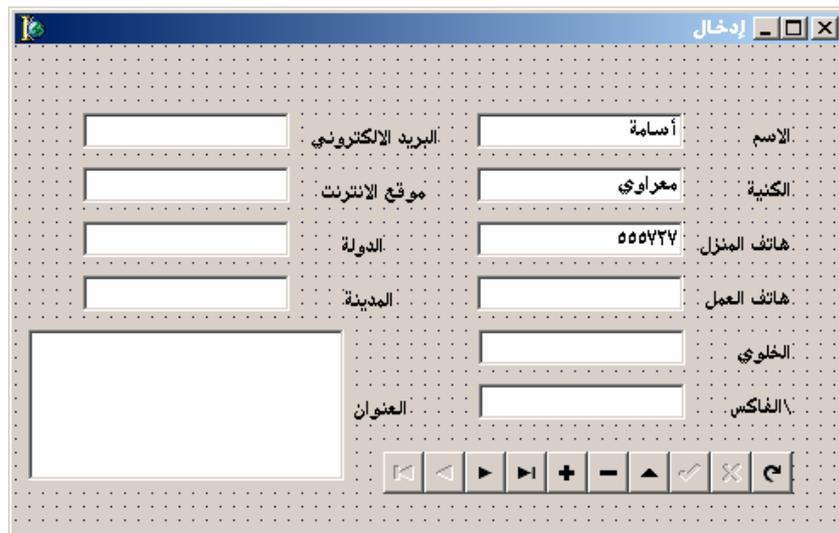
. DataEnterU

DBNavigator

Label

DBEdit

:



( Label

)

. Form1.DataSource1

DataSource

. Label

DataField

DBEdit

:

DataEnter.ShowModal ;

DBGrid

DBGrid1

OnDbClick

DataEnter.ShowModal ;

:

QReport

:

: 7

QReport

Rave

:

7

QReport

Compponant → install package → add

. Delphi7

Bin

dclqrt60.bpl

:

Uses

Main

. Printform Name

Table1

:

Qreport

QuickRep

HasDetail HasColumnHeader : Band

True

. HasPagefooter HasPageHeader

. Form1.DataSource1

Dataset

"

" Caption

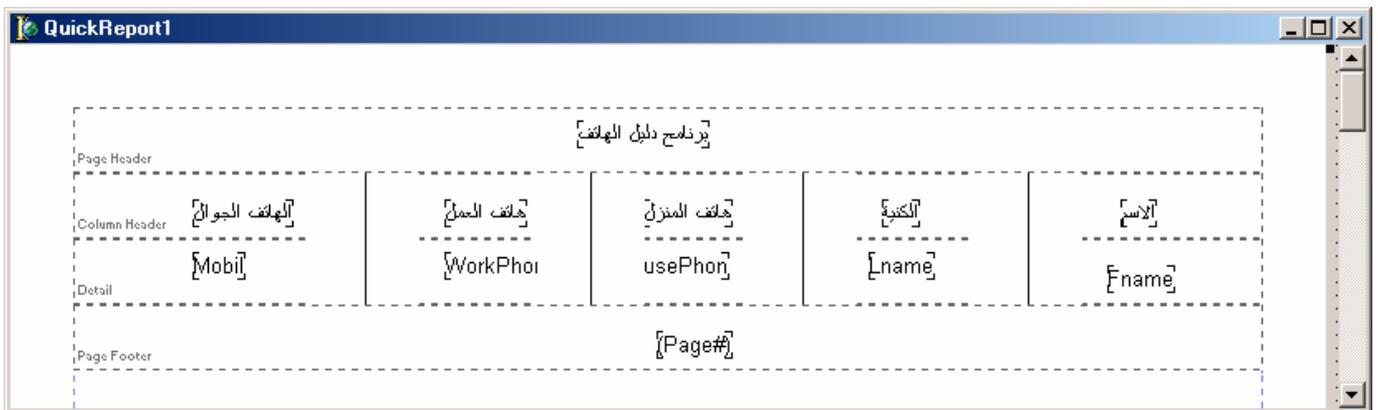
Page Header

QRlabel

:

QRlabel

Column Header



Dataset

QRDbText

Detail

... Page Number

data

QRSysData

Page Footer

. PrintUnit

Preview

QUickRep1

:

Printform.QuickRep1.Preview

```

:
.
:
Edit1
( Enter )
: Edit1 OnKeyPress
if key = char( VK_Return ) then
btnsearch.Click ;
Enter VK_Return
F1..F12 ( Virtual Key )
( ... End Delete Caps lock Tab
Windows.VK_
:
:
If key = #13 then btnsearch.Click ;
# Enter VK_Return 13
S := S:=#89#111#117 :
'You'
:
If key = #13 then BtnSearchClick (Sender);
) BtnSearch Click
Implementation Type BtnSearchClick
....
Edit2 2
:
const s = ['0','1','2','3','4','5','6','7','8','9','p',char(VK_back)];
begin
if not ( key in s )
then key:= char(vk_capital)

```

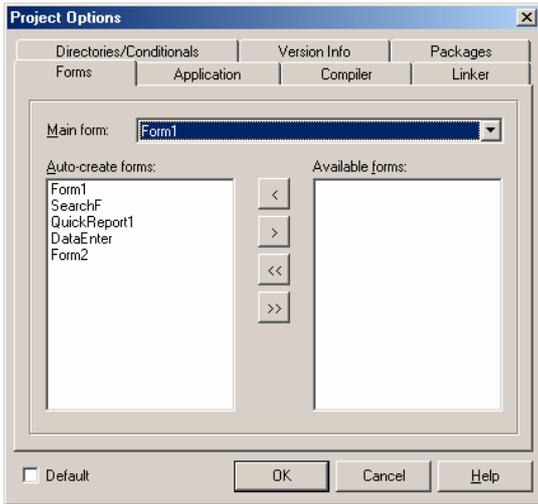
```

    VK_back
    Caps Lock      Vk_Capital
    DBEdit
    Enter
    : DBEdit1      OnKeyPress
    If key = #13 then DBEdit2.SetFocus ;
    :              OnKeyPress
    If key =#13 then dbedit3.SetFocus ;
    (              )      SetFocus
    Button1.SetFocus
    Space      Enter
    :
    MyPhone.Dpr      Project → View Source
    Begin      Uses
    Application.Initialize;
    Application.CreateForm(TForm1, Form1);
    Application.CreateForm(TDataEnter, DataEnter);
    Application.CreateForm(TForm2, Form2);
    Application.Run;
    Form1      Application.CreateForm ( TFom1,Form1)
    Form1      Main.pas      Interface      TForm1
    ....      CreateForm
    Application.CreateForm ( TFom1,Form1)
    . (              )      1
    ....      2
    .      3
    . Form1      OnCreate      4
    :
    : Form1      1

```

: DataEnter 2

: Form2 3



Avialable Form

>

Main Form

Project → Options

Forms

Auto-Create Forms

Available Form

Show

ShowModal

```
Dataenter := TDataEnter.Create(application);
Try
DataEnter.Showmodal;
Finally
DataEnter.Release ;
end;
```

```
Var
) TDataEnter DataEnter
Delphi Create ( DataEnterU.pas Interface
Application
```

DataEnter.Release

Release

DataEnter.Free

ShowModal

Show

:

:

DataEnter

OnClose

action := Cafree;

DataEnter := nil;

: ( )

If DataEnter = nil then

DataEnter := TDataEnter.Create(application);

DataEnter.Show;

( )

OnClose

:

Action

	CaNone
	CaFree
Show FormStyle := fsNormal	CaHide
fsMDIChild	CaMinimize

DataEnter

( Null )

DataEnter = Nil

OnClose

:

### : Windows Registry

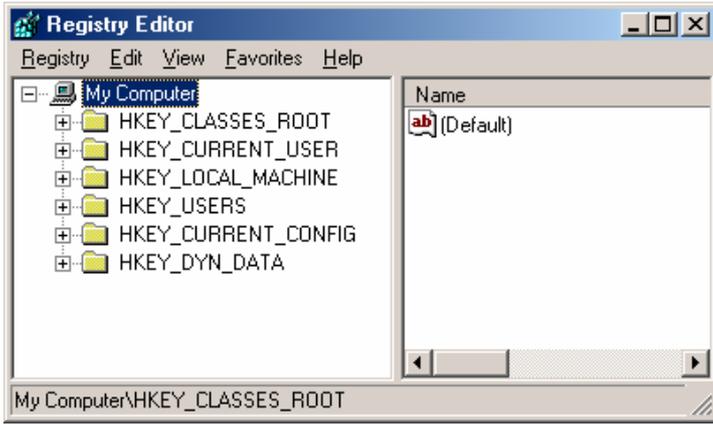
Windows

User.dat System.dat

. Ok

Regedit

Run



+

Root key

Registry → Export

```

)
:
: HKEY_CLASSES_ROOT
(
... .Doc .jpg
: HKEY_CURRENT_USER
.....
: HKEY_LOCAL_MACHINE
(Driver )
....
)
: HKEY_USERS
(..
.
: HKEY_CURRENT_CONFIG
.
Windows NT )
: HKEY_DYN_Data
. (
)
( WINDOWS Me

```

```

( .....
    Windows Registry
    800 Windows 2000 Registry
    : Registry
)
:
. (
    [HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion]
    . ( Regedit ) RegisteredOwner
        Edit1
        USES Registry

```

```

Var reg:registry ;
Begin
reg:= tregistry.Create ;//
try
reg.RootKey := HKEY_LOCAL_MACHINE ;//
reg.OpenKey('SOFTWARE\Microsoft\Windows\CurrentVersion',false) ;
edit1.text := reg.ReadString('RegisteredOwner');//
reg.CloseKey ; //
Finally
reg.Free ;//
end;

```

OpenKey  
.True

```

:
Var reg:registry ;
Begin
reg:= tregistry.Create ;//
try
reg.RootKey := HKEY_LOCAL_MACHINE ;//
reg.OpenKey('SOFTWARE\Microsoft\Windows\CurrentVersion',false) ;

```

<http://www.alshater.net>

```
reg.WriteString('RegisteredOwner',edit1.Text ); //
```

```
reg.CloseKey ; //
```

```
Finally
```

```
reg.Free ; //
```

```
end;
```

: : 2

:

IndexBy

```
HKEY_CURRENT_USER\Software\MyPhone
```

1

."

"

Form1

:

```
Var reg:tregistry ;
```

```
Begin
```

```
reg:= tregistry.Create ;
```

```
try
```

```
reg.RootKey := HKEY_CURRENT_USER ;
```

```
reg.OpenKey('SOFTWARE\MyPhone',True) ;
```

```
if button4.Caption = ' ' Then
```

```
reg.WriteInteger ('IndexBy',1 )
```

```
else reg.WriteInteger ('IndexBy',0 )
```

```
reg.CloseKey ;
```

```
Finally
```

```
reg.Free ;
```

```
end;
```

WriteInteger

OpenKey

1

IndexBy

:

```
RBTLname
```

```
reg:= tregistry.Create ;
```

```
try
```

```
reg.RootKey := HKEY_CURRENT_USER ;
```

```
reg.OpenKey('SOFTWARE\MyPhone',True) ;
```

```
if reg.ReadInteger ('IndexBy') = 1 then begin
```

<http://www.alshater.net>

RBTLname.Checked := true;

RBTLnameClick(Sender);

button5.Caption := ' ' ;

end

reg.CloseKey ;

Finally

reg.Free ;

end;

1 IndexBy

)

:

.(

**: Windows API**

.DLL

)

Api

Hard Disk

:

**: Windows 1**

**ExitWindowsEx()**

:

ExitWindowsEx(ewx\_ShutDown,0) ;

)

(

**. ExitWindowsEx(ewx\_Reboot,0) :**

:

2

:

<http://www.alshater.net>

```
LoadKeyboardLayout('00002801',klf_activate) ;
```

```
    OnCreate
```

```
    Edit
```

```
00002801
```

```
. 00000409
```

```
. Form1
```

```
    OnCreate
```

```
:
```

```
:
```

```
    OnEnter
```

```
LoadKeyboardLayout('00000409 ',klf_activate) ;
```

```
OnExit
```

```
LoadKeyboardLayout('00002801',klf_activate) ;
```

```
    : MessageBox
```

```
        MessageDlg ShowMessage
```

```
        Api
```

```
        MMessageBox
```

```
:
```

```
MessageBox ( 0,'                ', MB_Ok );
```

```
(      )
```

```
Ok
```

```
:
```

```
If MessageBox ( 0,'                ', Mb_YesNo ) = IDYES
```

```
then
```

```
Form1.color := clred;
```

```
. F1
```

```
    MessagBox
```

```
:
```

```
    Thandle
```

```
    Handle
```

```
Form
```

```
)
```

```
( .... Edit
```

```
Api
```

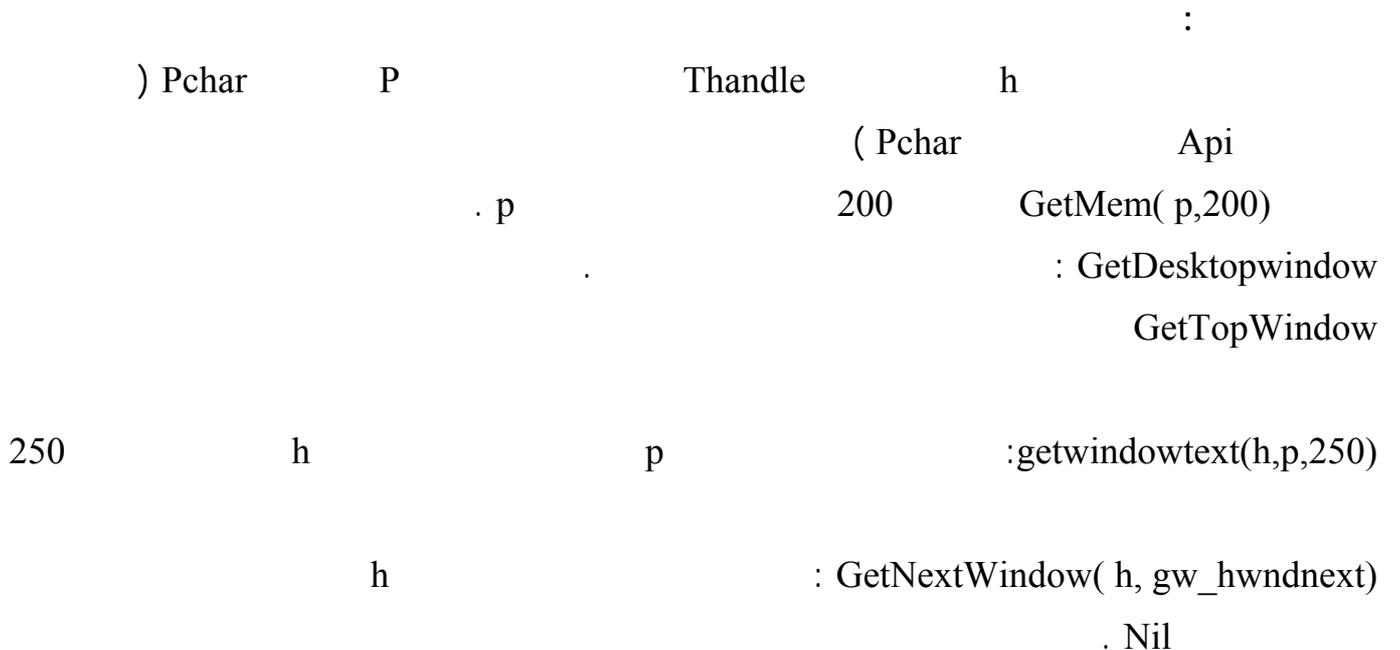
```
:
```

ListBox

```

var h:THandle;
p:pchar;
begin
getmem(p,250);
h:= gettopwindow ( getdesktopwindow) ;
getwindowtext(h,p,250);
listbox1.Items.Add(p);
while h > 0 do begin
h:= getnextwindow( h,gw_hwndnext);
getwindowtext(h,p,250);
listbox1.Items.Add(p) ;
end;
freemem(p,200);
end;

```



: Private

```

hTaskBar: THandle;

```

: OnCreate

```

hTaskBar := FindWindow('Shell_TrayWnd', nil);

```

<http://www.alshater.net>

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:

3

ShowWindow(hTaskBar, SW\_HIDE);

.

:

4

ShowWindow(hTaskBar, SW\_SHOW);

.

:

F1

1

Windows

Windows Api

2

Windows.pas

. Windows Api

Windows Api

3

. MicroSoft Visual Studio

MSDN Library

:

: ( Add new omponent )

:

BDE

TLabel

object-oriented programming

Delphi

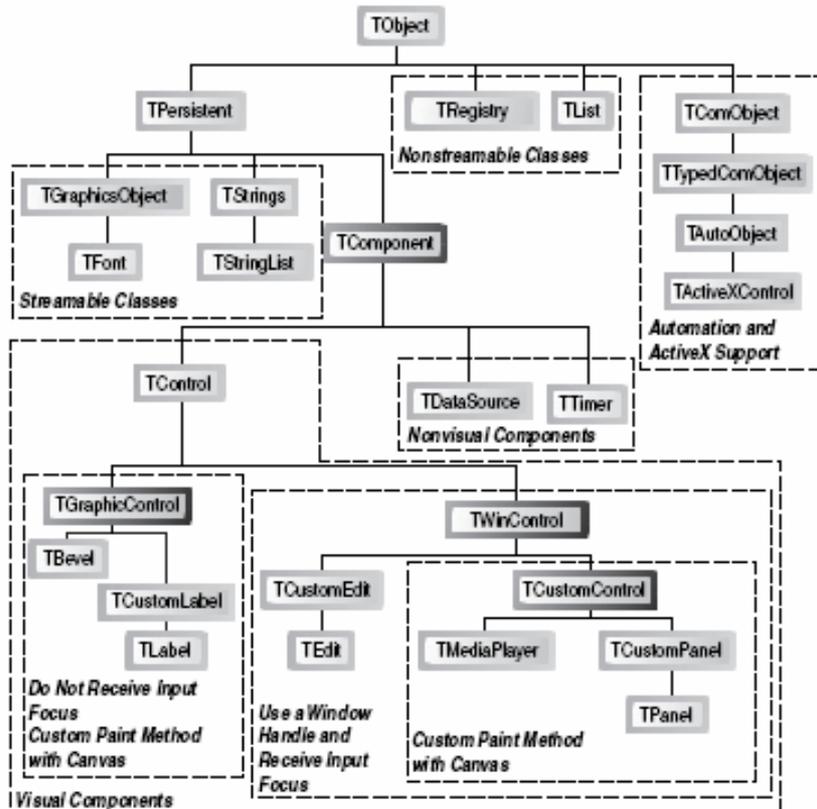
(

( )

Tobject

Tobject

:



:

:

:

: .bpl

1

bpl

Install Package

Component

Add

.bpl

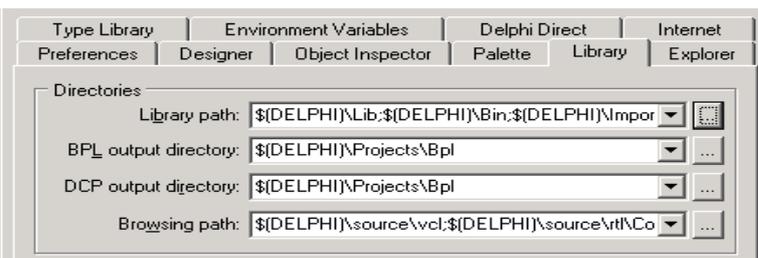
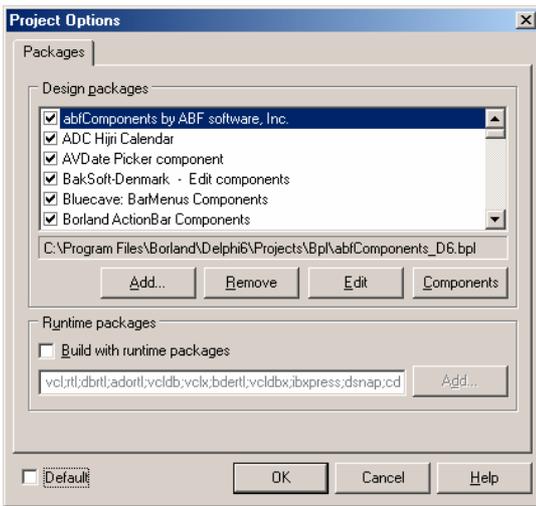
. Ok

)

TIBEAntialiasButton02\_all

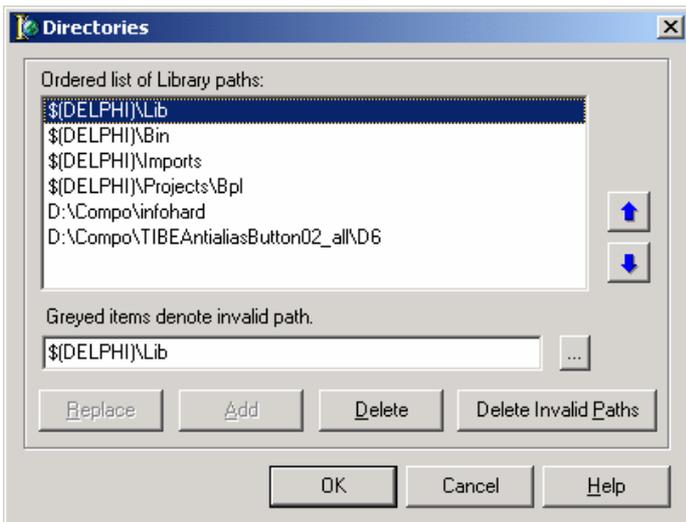
.

http://www.ibe-software.com



Tools → Environment Options

Library



Library path

:

( ... )

( pas Dcu bpl )

Ok Add

)

( Demo

: .Dpk 2

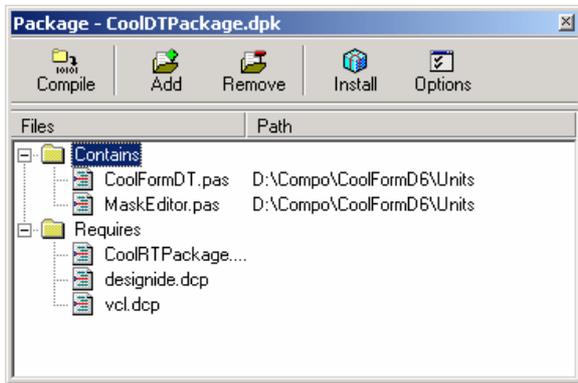
( Delphi Package ) .Dpk

:

: ok .Dpk

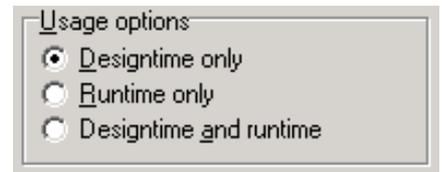
File → Open

Install



option

Description



. Install

: Pas

3

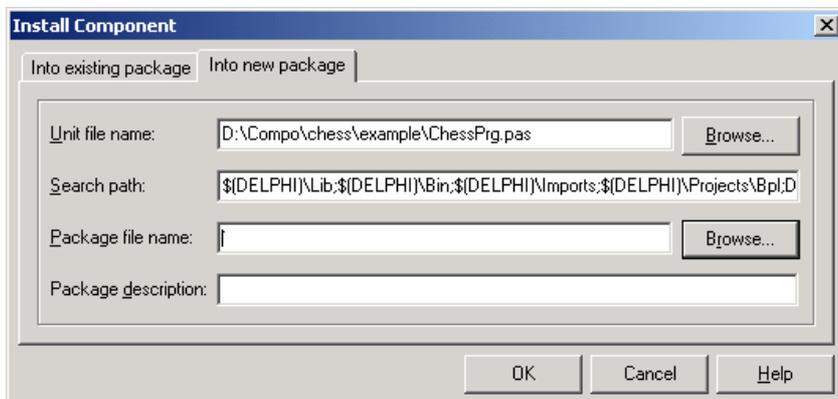
File

: →Open

Component → Install

Component

Into New package



ok

Package file name

. Install

( Setup )

4

.Dpk

Package

Unit

Package

Install

)

Bpl

. ( OCX DLL

Bpl

Ocx .DLL

.Exe

1

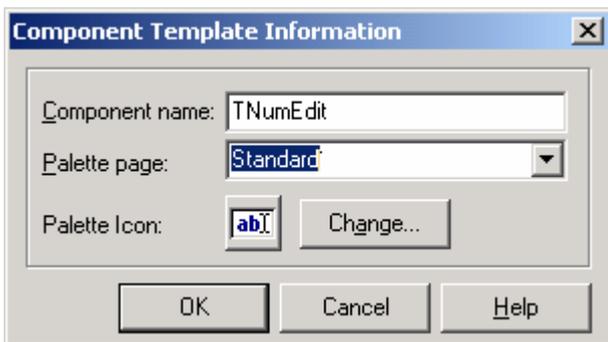
: OnKeyPress

Edit

```
const s= [ '1','2','3','4','5','6','7','8','9','0',char(Vk_back)];
begin
if not (key in s ) then
key := char(VK_CAPITAL )
end;
```

Component → Create Component Template

Edit1



Component name

Palette Page

( TNumEdit )

(

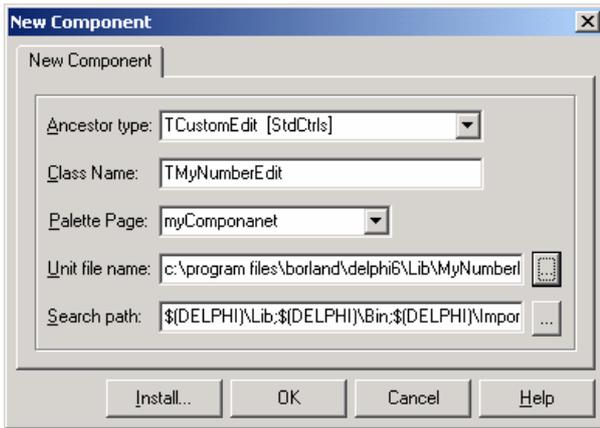
. Change

Ok

2

File → Close All

: Component → New Component



:  
 TCustomEdit      Ancestor type  
 .  
 Class Name  
 TMyNumberEdit ( T )  
 Palette Page  
 . ( MyComponent )  
 MyNumEdit      ok

```
unit MyNumberEdit;
interface
uses
  Windows, Messages, SysUtils, Classes, Controls, StdCtrls;
type
  TMyNumberEdit = class(TCustomEdit)
  private
    { Private declarations }

  protected
    { Protected declarations }
  public
    { Public declarations }
  published
    { Published declarations }
  end;
procedure Register;
implementation
procedure Register;
begin
  RegisterComponents('Standard', [MyNumberEdit]);
end;
end.
```

```
TMyNumEdit      TMyNumberEdit = class(TCustomEdit)    1
  TEdit      TCustomEdit    ) TEdit      TCustomEdit
  . (
```

: protected 2

. ( ) ( )

.MyNumberEdit

Public : published 3

... Event ( Object inspector )

: procedure Register 4

RegisterComponents('Standard', [MyNumberEdit]);

. Standard MyNumberEdit  
About About

: Public

constructor Create(AOwner: TComponent); override;

Create Constructor

. Procedure Constructor

: Published

Property About : string Read FAbout Write Fabout;

Ctrl + Shift + C ( )

. private String FAbout

String About

. Write FAbout Read FAbout

Ctrl + Shift + C Constructor

Inherited Implementation

. TCustomEdit

: Inherited

FABout := 'M.Khaled Nasser Agha';

. MyNumberEdit

Component → install component

Editnumber into new package

Install ok Package File Name

) Standard

Compile

(

About

Events

Num

. ( TEdit

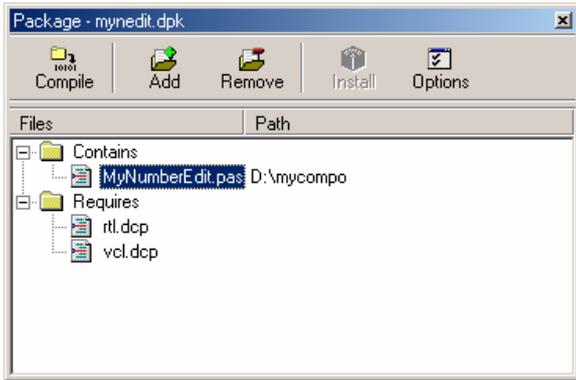
Text

)

File → ReOpen

Editnumber.dpk

MyNumberEdit.pas



Compile

... Standard

TMyNumberEdit

. Published

property Num: Extended read FNum write SetFNum;

FNum

Ctrl + Shift + C

Implementation

SetNum

Private

:

FNum := Value :

SetNum

Text := floattostr(value);

Compile

(

)

Standard

MyNumberEdit

Num

Enter

. MyNumberEdit.pas

EditNumber.dpk

TCustomEdit

KeyPress

: Public

procedure KeyPress(var Key: Char); override;

Inherited

Ctrl + Shift + C

TCustomEdit

KeyPress

:

Implementation

<http://www.alshater.net>

```
const NumberChar = [ '1','2','3','4','5','6','7','8','9','0','.'];
```

```
      : Inherited      KeyPress
```

```
If not (key in NumberChar ) Then key := char(VK_Capital);
```

```
      EditNumber.dpk      Compile
```

```
Edit
```

```
Editnumber.dbk
```

```
:      Published
```

```
property BiDiMode;
```

```
property CharCase;
```

```
property Color;
```

```
property OnEnter;
```

```
property OnKeyPress;
```

```
property OnKeyDown;
```

```
property OnKeyUp;
```

```
Compile
```

```
: MynumberEdit.pas
```

```
unit MyNumberEdit;
```

```
interface
```

```
uses
```

```
Windows, Messages, SysUtils, Classes, Controls, StdCtrls;
```

```
type
```

```
TMyNumberEdit = class(TCustomEdit)
```

```
private
```

```
FAbout: string;
```

```
FNum: Extended;
```

```
procedure SetFNum(const Value: Extended);
```

```
{ Private declarations }
```

```
protected
```

```
{ Protected declarations }
```

```
public
```

```
constructor Create(AOwner: TComponent); override;
```

```
procedure KeyPress(var Key: Char); override;
```

```
{ Public declarations }
```

```
published
```

```
Property About : string Read FAbout Write Fabout;
```

```
property Num: Extended read FNum write SetFNum;
```

```
property BiDiMode;
```

```
property CharCase;
```

```
property Color;
```

```

http://www.alshater.net
property Enabled;
property Font;
property ParentBiDiMode;
property ParentColor;
property ParentCtl3D;
property ParentFont;
property PasswordChar;
property ReadOnly;
property ShowHint;
property TabOrder;
property TabStop;
property Visible;
property OnChange;
property OnClick;
property OnDblClick;
property OnEnter;
property OnExit;
property OnKeyDown;
property OnKeyUp;
    { Published declarations }
end;
procedure Register;
    const NumberChar = [ '1','2','3','4','5','6','7','8','9','0','.'];
implementation
procedure Register;
begin
    RegisterComponents('Standard', [TMyNumberEdit]);
end;
{ TMyNumberEdit }
constructor TMyNumberEdit.Create(AOwner: TComponent);
begin
    inherited;
    FABout := 'M.Khaled Nasser Agha';
end;
procedure TMyNumberEdit.KeyPress(var Key: Char);
begin
    inherited;
    if not (key in NumberChar ) then
key := char(VK_Capital);
end;
procedure TMyNumberEdit.SetFNum(const Value: Extended);
begin
    FNum := Value;
    Text := floattostr(value);
end;
end.

```

**: Drag and Drop :**

**: Sender 1**

Event

Sender

. TObject Sender

procedure TForm1.Button1Click(Sender: TObject);

Button1

. Button1

:

: Button

: Button1 1

If sender = Button1 Then Showmessage ( ' You Click On Button1 ');

If sender = Button2 Then Showmessage ( ' You Click on Button2 ');

OnClick Event Button2 2

. Button1Click

: 2

: ListBox Label : 1

Listbox Label

Label Label LlistBox1

. dmAutomatic DragMode

: ListBox1 OnDragOver

Accept := Source is Tlabel;

: ListBox1DragOver

. ListBox1 : Sender

. Label : Source

: X,Y

: State

) True : Accept

(

```

        . TLabel          Source          True          : Source Is TLabel
        :
        OnDragDrop
( sender as Tlistbox ).color := (Source as TLabel ).color ;
    Tlistbox          Sender          Sender As TlistBox
.
        . Source As TLabel
        ListBox1          Label
        : 2
        Picture          Image
Image1          dmAutomatic          DragMode
.
        :          Form1          OnDragOver
accept := Source is Timage;
.
        :          OnDragDrop
(Source as Timage).Top := y;
(Source as Timage).Left := X;
        Image1
        .ListBox

```

```

:
TImage      TForm      Canvas
.
:
x,y      Form1.Canvas.MoveTo(x,y)
. Form1      OnMouseDown
x,y      Form1.Canvas.LineTo(x,y)
. Form1      OnMouseUp
.
OnMouseMove
:
Form1.Canvas.LineTo(x,y);
:
:      Var
var
Form1: TForm1; Drawing : boolean = false;
:      OnMouseDown
Drawing := True;
Canvas.MoveTo(x,y);
:      OnMouseMove
if Drawing Then Form1.Canvas.LineTo(x,y);
:      OnMouseUp
Drawing := false;
.
OnMouseMove
.
Integer      X,y      TPoint
:      private
Origin : TPoint;

```

```

: OnMouseDown
Drawing := True; Canvas.MoveTo(x,y);
Origin := point(x,y);

```

```

: OnMouseMove
If Drawing then Begin
Canvas.MoveTo(origin.X,origin.y) ; Form1.Canvas.LineTo(x,y);
end;

```

```

: OnMouseUp
Canvas.MoveTo(origin.X,origin.Y);
canvas.LineTo(x,y);
Drawing := false;

```

```

OnMouseMove OnMouseUp
OnMouseMove
:
Tpoint Movept Private OnMoseMove
.
Origin,Movept :Tpoint;
: OnMouseDown
Movept := Point(x,y);
: OnMouseMove
If Drawing then begin
canvas.Pen.Mode := pmNotXor;
canvas.MoveTo(origin.X,origin.y) ; } 1
Canvas.LineTo(Movept.x,movept.y); }
Canvas.moveto(origin.X,origin.y) ; } 2
Canvas.LineTo(x,y);
end;
movept := point(x,y);
Canvas.Pen.Mode := pmCopy;
end;
pmNotXor pen Mode
PmCopy

```

http://www.alshater.net

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)

1

)

( Movept

(

pmNotXor

mode

2

OnMouseMove

(

)

:

```

If Drawing then begin
  canvas.Pen.Color := form1.Color ;
  canvas.MoveTo(origin.X,origin.y) ;
  Canvas.LineTo(Movept.x,movept.y);
  canvas.Pen.Color := clblack;
  canvas.moveto(origin.X,origin.y) ;
  Form1.Canvas.LineTo(x,y);
end;
movept := point(x,y);

```

...

:

:

New Button

Toolbar

. ( Painting

Gragh

)

:

Image Editor

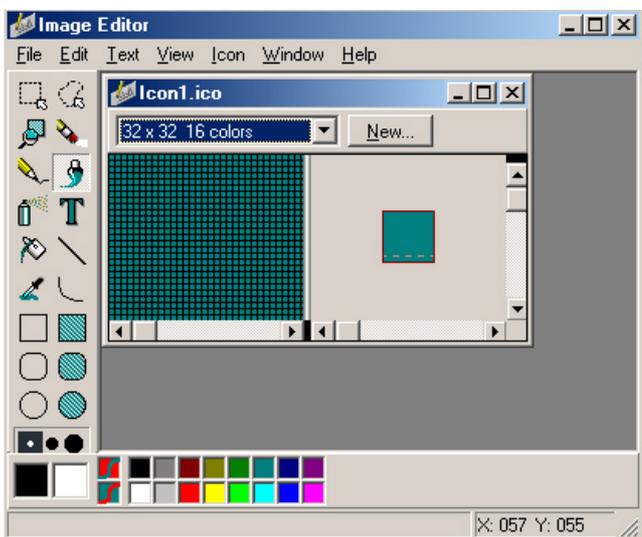
Tools

:

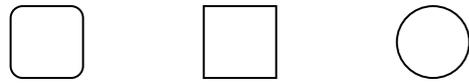
File → New → icon File

16 Color Small Icon

Icon1.ico



Line.ico



Add

Win32

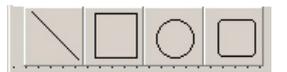
ImageList

ImageIndex

Images

Imagelist1

Toolbar1



. True

Flat

ToolBars

True

Grouped

tbsCheck

Style

Type

: Gragh

type

**TDrawingTool = (dtLine, dtRectangle, dtEllipse, dtRoundRect);**

TForm1 = class(TForm)

**const**

dtLine = 0;

dtRectangle = 1;

dtEllipse = 2;

dtRoundRect = 3;

: Private

DrawingTool: TDrawingTool;

DrawingTool := dtLine;

DrawingTool := dtRectangle;

<http://www.alshater.net>

```
DrawingTool := dtEllipse;
```

```
:
```

```
DrawingTool := dtRoundRect;
```

```
DrawingTool
```

```
OnMouseUp
```

```
DrawingTool
```

```
case DrawingTool of
```

```
dtLine:
```

```
begin
```

```
Canvas.MoveTo(Origin.X, Origin.Y);
```

```
Canvas.LineTo(X, Y)
```

```
end;
```

```
dtRectangle: Canvas.Rectangle(Origin.X, Origin.Y, X, Y);
```

```
dtEllipse: Canvas.Ellipse(Origin.X, Origin.Y, X, Y);
```

```
dtRoundRect: Canvas.RoundRect(Origin.X, Origin.Y, X, Y,  
(Origin.X - X) div 2, (Origin.Y - Y) div 2);
```

```
end;
```

```
Drawing := False;
```

```
End;
```

```
OnMuseMove
```

```
:
```

```
if Drawing then
```

```
begin
```

```
Canvas.Pen.Mode := pmNotXor;
```

```
case DrawingTool of
```

```
dtLine: begin
```

```
Canvas.MoveTo(Origin.X, Origin.Y);
```

```
Canvas.LineTo(MovePt.X, MovePt.Y);
```

```
Canvas.MoveTo(Origin.X, Origin.Y);
```

```
Canvas.LineTo(X, Y);
```

```
end;
```

```
dtRectangle: begin
```

```
Canvas.Rectangle(Origin.X, Origin.Y, MovePt.X, MovePt.Y);
```

```
Canvas.Rectangle(Origin.X, Origin.Y, X, Y);
```

```
end;
```

```
dtEllipse: begin
```

```
Canvas.Ellipse(Origin.X, Origin.Y, X, Y);
```

```
Canvas.Ellipse(Origin.X, Origin.Y, X, Y);
```

```
end;
```

```
dtRoundRect: begin
```

```
Canvas.RoundRect(Origin.X, Origin.Y, X, Y,
```

```
(Origin.X - X) div 2, (Origin.Y - Y) div 2);
```

```
Canvas.RoundRect(Origin.X, Origin.Y, X, Y,
```

```

http://www.alshater.net
(Origin.X - X) div 2, (Origin.Y - Y) div 2);
end;
end;
end;
MovePt := Point(X, Y);
Canvas.Pen.Mode := pmCopy;
end;

```

```

:
: ( Rectangle )

```

```

: ( Ellipse)

```

```

: ( RoundRect )

```

```

)

```

```

(

```

```

:

```

```

...

```

```

:

```

```

. False Visible Win32 Toolbar

```

```

. New Button

```

```

Toolbar2 ImageList1

```

```

)

```

C:\Program Files\Borland\Delphi6\Demos\Doc\Graphex

```

:

```

solid.bmp - dashed.bmp - dotted.bmp - dashdot.bmp - dashdot2.bmp - clear.bmp

```

:

```



```

tbsCheck Style True Grouped

```

```

New Separator toolbar1

```

```

: ImageList1

```

```

tbsCheck      Style
:
toolbar2.Visible := not toolbar2.Visible ;
.
: Toolbar2
canvas.Pen.Style := pssolid;
:
canvas.Pen.Style := psDash;
:
canvas.Pen.Style := psdot;
:
canvas.Pen.Style := psdashdot ;
:
canvas.Pen.Style := psdotdot ;
:
canvas.Pen.Style := psclear ;
:
: Tpen
. ColorDialog
( Separator )   Toolbar2
:
if ColorDialog1.Execute then
  Canvas.Pen.Color := ColorDialog1.Color;
. ( colors.bmp )
:
:
. ToolBar2      Edit
: Associate    Edit1      Win32      UpDown
:Edit1      OnChange
canvas.Pen.Width := strtoint(edit1.Text );
:
:
```

:

tbsCheck                      Style                      Toolbar1

:

Toolbar3.Visible := Not Toolbar3.Visible ;

Grouped

:

tbsCheck                      Style                      True



:

canvas.Brush.Style := bssolid;

:

canvas.Brush.Style := bsclear;

:

canvas.Brush.Style := bshorizontal;

:

Style

bsVertical – bsFdiagonal – bsbdiaognal – bsColor – bsDiagCross

:

: ToolBar3

If ColorDialog1.Excetue then canvas.Brush.Color := ColorDialog1.Color ;

:

Status bar

:

. Win32                      StatusBar

Panel Editor                      2

Add New

. 150                      Width                      0                      3

:                      OnMouseDown                      4

StatusBar1.Panels[0].Text := Format ('origin = %d , %d',[x,y]);

:                      OnMouseMove                      5

StatusBar1.Panels[1].Text := Format ('Point = %d , %d',[x,y]);

		:	
		:	1
:			
	. alClient	Align	Win32
		ScrollBar1	Image
			2
		True	AutoSize
		0	Left
		True	Stretch
		0	Right

:

:		Image1	Picture	
Picture	.Bmp		:	1
	Image1	Bitmap	:	2
			OnCreate	

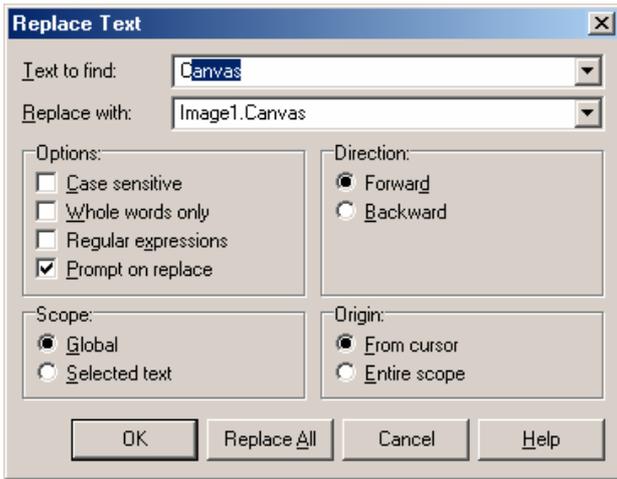
```

Var
Bitmap : TBitmap ;
Begin
Bitmap := Tbitmap.Create ;
Bitmap.Width := 200;
Bitmap.Height := 200;
Image1.Picture.Graphic := Bitmap;
Bitmap.Free ;

```

Canvas

:



Form1MouseUp

Graph

1

: Search → Replace

Canvas Text To Find

Image1.Canvas Replace With

Replace All

Canvas.pen...

Image1.Canvas.pen..

Event

2

OnMousemove

OnMouseup

FormMouseMove

.. OnmouseDown



File Standard MainMenu

Edit

Close ;



) Graph Public

CurrentFile : String;

New

Form2.ShowModal;

```

var bitmap : tbitmap;
begin
Bitmap := Tbitmap.Create ;
Bitmap.Width := strtoint(edit1.Text );
Bitmap.Height := strtoint(edit2.Text );
form1.Image1.Picture.Graphic := Bitmap;
bitmap.Free ;
Form1.CurrentFile := " ;
close;

```

Close; :

```

Image
Open
:
Dialog
OpenPictureDialog
File
Open
if OpenPictureDialog1.Execute then
begin
CurrentFile := OpenPictureDialog1.FileName;
Image1.Picture.LoadFromFile(CurrentFile); end;
Save
CurrentFile = "
: Saveas1Click
Save
if CurrentFile <> " then
Image1.Picture.SaveToFile(CurrentFile)
else SaveAs1Click(Sender);
: Save As
Save As
SavePictureDialog
File
if SavePictureDialog1.Execute then
begin
CurrentFile := SavePictureDialog1.FileName;
Image1.Picture.SaveToFile(CurrentFile); end;
:
5
QReport
: (
Qreport
)
Print
Graph
Uses
Printers
:
File
printer.BeginDoc ;
printer.Canvas.Draw(0,0,image1.Picture.Graphic );
printer.EndDoc ;
BeginDoc
Canvas
Image1
( )
Canvas.Draw
EndDoc
: Draw
StretchDraw
printer.Canvas.StretchDraw(rect(0,0,4000,4000),image1.Picture.Graphic );
Rect

```

: Clipboard

:

CopyToClipboard

DbImage

Image

PasteFromClipboard

CutToClipboard

Clipboard

Graph

Uses

Clipboard

:

1

Copy

Clipboard.Assign(Image.Picture);

. Clipboard

:

2

:

: Cut

Var ARect :TRect ;

Clipboard.Assign(Image.Picture);

image1.Canvas.CopyMode := cmwhiteness;

ARect :=rect(0,0,image1.Width,image1.Height);

image1.Canvas.CopyRect( ARect,image1.Canvas,ARect);

image1.canvas.copymode := cmsrccopy;

TRect

)

: Canvas.CopyMode := cmWhiteness

. (

. Image

: ARect := Rect ( 0,0,...)

: Canvas.CopyRect( ARect,Image.Canvas,ARect)

ARect

. CopyMode := cmWhiteness

CopyMode

: Canvas.CopyMode := cmsrcCopy

:

:

```
image1.Picture.Bitmap.Assign(clipboard);
)
```

:  
(

:

: Paste

```
if Clipboard.HasFormat(cf_BITMAP) then
image1.Picture.Bitmap.Assign(clipboard);
```

HasFormat (CF\_BITMAP)

: ( )

:

( )

:

System

MediaPlayer

:

: 1

:

MediaPlayer

	C:\WINDOWS\MEDIA\ CHORD.WAV	Filename
	True	Autoopen

.

:

: 2

:

OpenDialog

.MP3

.WAV

OpenDialog1

Filter

.

```
MediaPlayer1.Close ;
if openDialog1.Execute then begin
MediaPlayer1.FileName := Opendialog1.FileName ;
MediaPlayer1.Open ;
end;
```

MediaPlayer

MediaPlayer.Open MediaPlayer

:

MediaPlayer Panel

.AVI OpenFileDialog Filter Panel1 Display  
.MPG .DAT

: ( )

C:\Program Files\Borland\Delphi6\Demos\CoolStuf\ speedis.avi

Play

: MediaPlayer

: SpeedButton

OnMouseUP

Uses

MMSystem

SpeedButton

PlaySound('C:\WINDOWS\MEDIA\DING.WAV',0,0)

```

:
:
:
C:\temp          Test.Bmp      C:\
: C:\temp
copyfile('c:\Test.bmp','c:\Temp\Test.bmp',False) ;
. (              ) :
(              ) :
          'C:\Temp\Des.bmp'
          C:\temp\des.bmp      C:\test.bmp
          .
          True                 :
          False                :
          :                    2
          ) :
:
Movefile('c:\temp\test.bmp','c:\movetest.bmp');
. (              ) :
:                    3
DeleteFile('c:\movetest.bmp');
:                    4
) :                    1
Rewrite Reset AssignFile ) ( Untyped File
( .. CloseFile Writeln Readln
:
: ( File Handles ) 2
Windows Api
. SysUtils

```

TFileStream

(

TMemoryStream TStream

: ( Working With File Handles )

:

: ( )

:

```

var FileHandle:integer;
S:string;
Begin
if Not FileExists('c:\MyFile.mka') then
FileHandle:= FileCreate('c:\MyFile.mka') Else
FileHandle:= FileOpen('c:\MyFile.mka',fmOpenReadWrite) ;
s:= 'khaled Nassr Agha' ;
FileWrite(FileHandle,Pointer(s)^,length(s ));
Fileclose(FileHandle);
end;

```

True

FileExists

FileHandle

FileCreate

FileOpen

fmOpenReadWrite

FileHandle

FileHandle

S

FileWrite

. S

FileClose

:

Memo

```

var FileHandle,FileSize : integer;
s:string;
begin
if FileExists ('c:\MyFile.mka') then begin
FileHandle:= FileOpen('c:\MyFile.mka',fmOpenReadWrite) ;

```

```

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FileSize:=getfilesize(FileHandle,nil);
setlength(s,FileSize);
Fileread(FileHandle,pointer(s)^,FileSize);
Memo1.Text := s;
Fileclose(FileHandle);
end;

```

Handle : SeekFile ( Handle, Offset ,origin)  
: Origin Origin Offset

	Offset	0
	Offset	1
	Offset	2

SeekFile(FileHandle,0,0)

12

Seekfile(FileHandle,12,2)

: File Stream

:

: TFileStream

:

```

Var FileStream : TFileStream ;
buffer : String;
begin
FileStream := TFileStream.Create('c:\MyStream.tst',fmCreate) ;
Buffer := ' This Line Will Be Save to File ' ;
FileStream.Write(pointer(Buffer)^,Length(Buffer));
FileStream.Free ;
end;

```

fmCreate C MyStream.Tst TFileStream.Create

( ) Buffer : FileStream.Write

FileStream : FileStream.Free

: TFileStream

Memo

```

Var FileStream : TFileStream ;
buffer : String;
FileSize : integer;
begin
FileStream := TFileStream.Create('c:\MyStream.tst',fmOpenRead) ;
FileSize := (FileStream.size) ;

```

```

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Setlength(Buffer,FileSize);
FileStream.read(pointer(Buffer)^,FileSize);
memo1.text := Buffer;
FileStream.Free ;
end;

```

```

FileStream.Size Create Buffer
SetLength . Memo1 Buffer
( Origin Seek : FileStream.Seek 1
.( SeekFile Origin
:
:
:
Calc.exe
WinExec('C:\Windows\Calc.exe' ,Sw_Show) ;
C:\Windows :
Windows Windows 2000 Windows Me Windows 98
C:\Win32 Xp
GetWindowsDirectoy : GetWindowsDirectory
) Pchar p (p,200);
FreeMem(p,200) GetMem(p,200)
: 2
( Microsoft Word )
:
Uses ShellApi
shellapi.ShellExecute(0 ,'Open','C:\My Documents\Test.doc',Nil,Nil,0) ;
. My Document Test.doc
. 'Print' 'Open'

```

C:\Mypicture.jpg

Internet

. Explorer

:

:

```
shellapi.ShellExecute(0 , 'Open', 'C:\My Documents', Nil, Nil, 0) ;
```

```
. C:\My Document
```

```

:
( Notepad )
MDI                               Txt                               Rtf
.
OpenDialog                         MainMenu
:
: Form1

```

bdRightToLeft	BiDiMode
	Caption
fsMDIForm	FormStyle
MainForm	Name
poDesktopCenter	Position

```

:( ) ( ) : MainMenu
: ( ) FileMenu Name ( )

```

Shortcut	Name	Caption
	New	&
	OpenFile	&
	CloseApp	&

```

: ( ) Window1 Name ( )

```

Shortcut	Name	Caption
		-

```

: OpenFileDialog

```

	.rtf	DefaultExt
	: Filter	Filter
Filter Name	Filter	
Rich Text	*.rtf	
Text File	*.Txt	
All File	*.*	

```

. MyTextEditor.Dpr Main.pas

```

MainMenu : File → New → Form

.FontDialog PrintDialog SaveDialog Win32 RichText

:

bdRightToLeft	BiDiMode
fsMDIChild	FormStyle
EditForm	Name

( ) ( ) ( ) MainMenu1

:

: ( ) FileMenu Name ( )

Shortcut	Name	Caption
	New	&
	OpenFile	&
Ctrl+S	Save	
	SaveAs	
	PrintFile	
	CloseFile	
	CloseAll	&

: ( ) EditMenu Name ( )

Shortcut	Name	Caption
Ctrl+C	CopyText	
Ctrl+X	Cutttext	
Ctrl+V	PasteText	
Ctrl+A	SelectAll	

: ( ) EditMenu Name ( )

Shortcut	Name	Caption
	Left1	
	Right1	
	Center1	
		-
	WordWrap1	
	Font1	
True	RadioItem	

--

: Richedit1

	alClient	Align
	Editor	Name

: Savedialog1

		.rtf	DefaultExt
		Filter	Filter
Filter Name	Filter		
Rich Text	*.rtf		
Text File	*.Txt		

EditText.pas

```

: MainForm
TEditForm.Create(Self);

: EditForm
TEditForm.Create(Self);

: EditForm OnClose
Action := CaFree ;
CaMinimized

(
( TrichEdit ) Editor

:
. EditText Private String PathName

const
DefaultFileName = ' ';

: EditText public
Procedure Open(const AFileName: string);

Ctrl+Alt+C

: Implementation
PathName := AFileName;
    
```

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```

Caption := ExtractFileName(AFileName);
with Editor do
begin
  Lines.LoadFromFile(PathName);
  SelStart := 0;
  Modified := False;
end;

: ExtractFileName ( AFileName)
: With Editor Do begin .... End;
Editor.Lines.LoadFromFile(PathName);
Editor.SelStart := 0;
Editor.Modified := False;

: Width
: Editor
Editor.selstart := 0
: True
Editorr.Modified

: MainForm
If OpenFileDialog1.Execute Then
TeditForm.Create(Self).Open(OpenDialog1.FileName ) ;
: Open
: Then
: EditForm
MainForm.Openfile.Click ;

: EditForm
OnCreate
PathName := DefaultFileName;
: PathName
:
: rtf
TRichEdit
Editor
Editor
Tstrings
Txt
rtf
. .Txt
÷
: EditForm

var S: Tstringlist;
begin
if PathName = DefaultFileName then
  SaveAsClick(Sender)
else
begin
if uppercase(rightstr(PathName,3)) = uppercase( 'rtf' ) then
  Editor.Lines.SaveToFile(PathName) else
try

```

```

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S:=Tstringlist.Create ;
s.AddStrings(Editor.Lines )
finally
s.SaveToFile(PathName) ;
end;
Editor.Modified := False;
end;

```

```

" " PathName
: PathName
) Editor.Lines.SaveToFile(PathName) rtf 1
'rtf' PathName
TStringList S Txt 2
Editor.Modified False Editor

```

```

: EditForm
SaveDialog1.FileName := PathName;
if SaveDialog1.Execute then
begin
PathName := SaveDialog1.FileName;

Caption := ExtractFileName(PathName);
SaveClick(Sender);
end;

```

```

PathName
SaveClick ( Sender )

```

```

: EditForm
Close;
: MainForm
Close;

```

: EditForm  
MainForm.CloseApp.Click ;

```

: EditForm OnCloseQuery
Const
SWarningText = '
begin
if Editor.Modified then
begin
case MessageDlg(Format(SWarningText + #13 + '%s', [PathName]), mtConfirmation,
[mbYes, mbNo, mbCancel], 0) of
mrYes: SaveClick(Self);
mrCancel: CanClose := False;
end;
end;
end;
end;

```

```

OnCloseQuery
CanClose
False True
True ) Editor.Modified
: (
. SaveClick : Yes
: No
CanClose : Cancel
False
MessageDlg #13
Enter
:
:
Editor.CopyToClipboard;
:
Editor.CutToClipboard;
:

```

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Editor.PasteFromClipboard;

:

Editor.SelectAll;

Editor

( )

:

Copytext.Enabled := editor.SelLength > 0;

Cutttext.Enabled := editor.SelLength > 0;

Pastetext.Enabled := clipboard.HasFormat(CF\_text);

. EditForm

uses

ClipBrd

Editor

SelLength

:

with Sender as TMenuItem do Checked := True;

with Editor.Paragraph do

if Left1.Checked then

Alignment := taLeftJustify

else if Right1.Checked then

Alignment := taRightJustify

else if Center1.Checked then

Alignment := taCenter;

OnClick

( ) ( )

. Left1Click

Event

:

with Editor do

begin

WordWrap := not WordWrap; { toggle word wrapping }

if WordWrap then

ScrollBars := ssVertical

else

ScrollBars := ssBoth;

WordWrap1.Checked := WordWrap; { set menu item check }

end;

:

FontDialog1.Font := Editor.Font;

if FontDialog1.Execute then

Editor.SelAttributes.Assign(FontDialog1.Font);

```

Memo
Memo
RichEdit
SelAttributes
: MainForm
(
:
. GroupIndex 1
1 0
GroupIndex 2
.
:
MainForm.Tile
)
:
MainForm.Cascade;
.
:
WindowsMenu MainForm
( ) Window1
.
( Setup )

```

### : Install Shelled Express

.....

Install Shelled Express

Install Shelled Professional

Install Shelled Express

:

Install Shelled Express

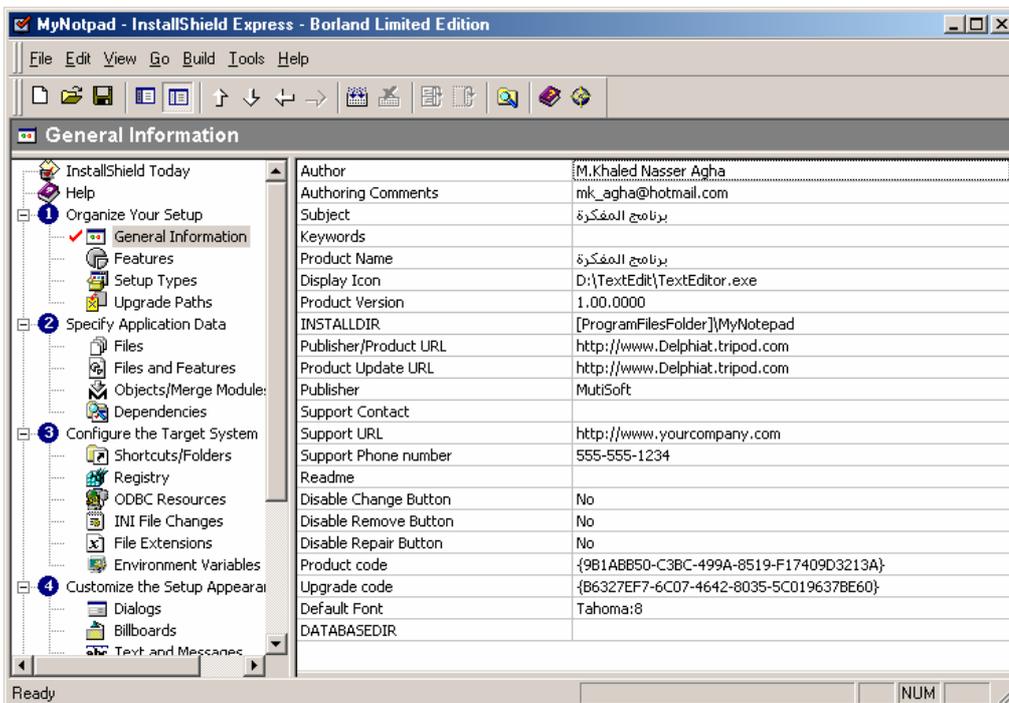
Start → Program → IntallShelled → Express – Borland Limited Edition .

: Create new project

C:\My Documents\MySetups\MyNotpad.ism      Project name and location

. Create

General Information



: INSTALLDIR

: Product Name

Setup Types

( Minimal )

( Typical )

( Custom )

Typical

Files

)

.Exe

...

Destination Computer

Source Computer's

INSTALLDIR

. Folder

Destination

Source Computer's Files

TextEditor.Exe

Computer Files

:

: Object/ Merge Modules

BDE

: BDE\_ent

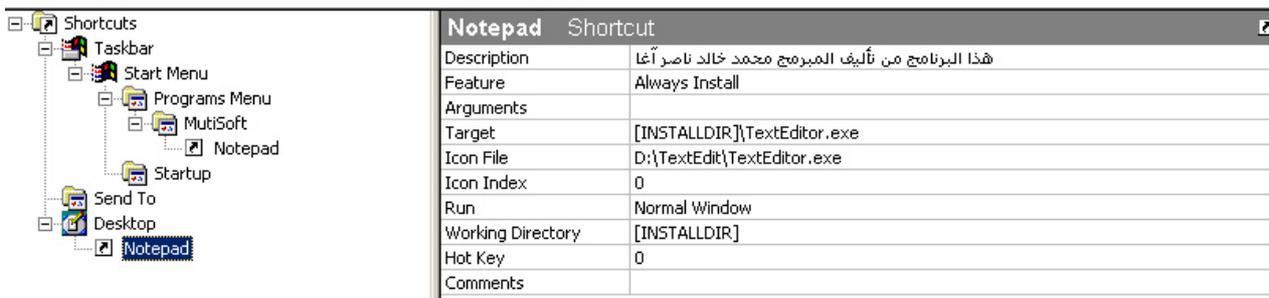
Alias

... . QuickRep

: QuickReport

:

: Shortcuts /folder's



New Folder

Program Menu

New Shortcut

Notepad

Win2000

:Description

)

: Target

. INSTALLDIR\TextEditor.exe

: IconFile

: Working Directory

.(

. Startup

)

Registry

.(

Dialog

)

.(

Requirement

( 2000 )

...

Custom

Build your release

:

)

: Media Size

.( 1.38

1

Gb Mb

: Media Size Unite

1024 512

: Cluster Size

)

True

: Compress Media

.(

Setup.exe

: Setup.exe

Setup.exe

Msi

True

Msi

. Setup.exe

instmsia.exe

: Include Msi Win9x engine

Msi

) Msi

Msi

( Msi

instmsia.exe

. True

.... instmsiw.exe

: Include Msi Windows Nt engine

True

: Generate AutoRun.inf

. DVD

Build

Build Custom

build completed with 0 errors, 0 warnings

Run Your

Custom

Test Your Release

Setup

C:\My Documents\MySetups\MyNotpad\Express\Custom\DiskImages\DISK1

Custom Distributed your release

... A:\

Install Shelled :

		Visual Basic .Net
		<a href="http://www.arabdevelopers.com">http://www.arabdevelopers.com</a>
		<a href="http://www.arabteam2000.com">http://www.arabteam2000.com</a>
		<a href="http://www.delphiforfun.com">http://www.delphiforfun.com</a>