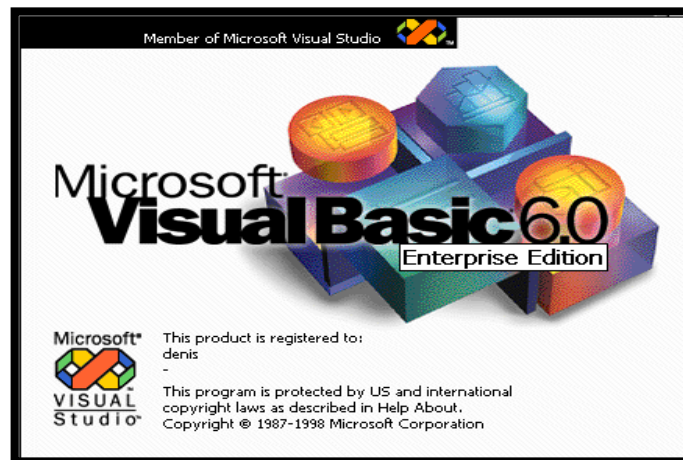





Database Programming in Visual Basic 6.0



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Create a table in MS-ACCESS

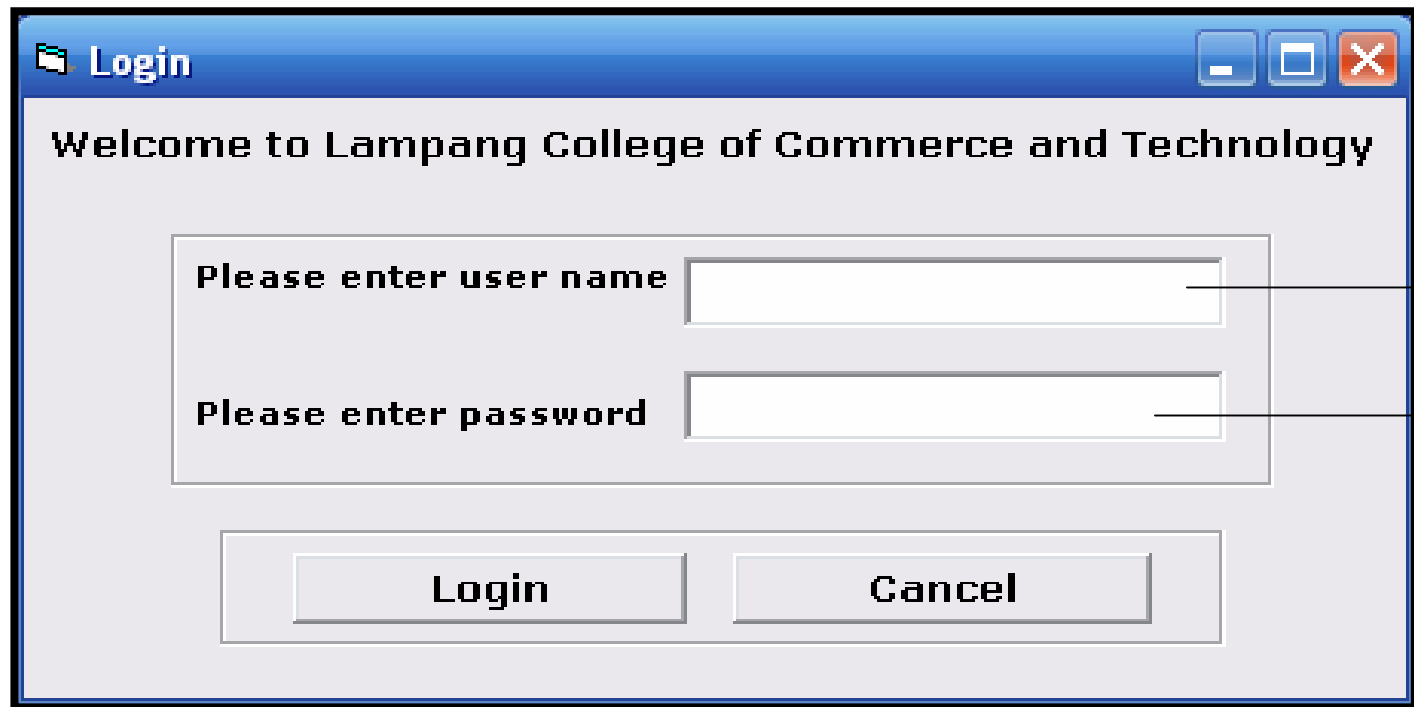
- Save database as test.mdb
- Save table as Teacher

	Field Name	Data Type
	T_code	Text
	T_Name	Text
	U_name	Text
	Password	Text

- Enter any five records

Design the following form in VB

- Form name Login



The image shows a screenshot of a Visual Basic (VB) form titled "Login". The form has a blue title bar with standard Windows window controls (minimize, maximize, close). The main content area is light gray and contains the following elements:

- A welcome message: "Welcome to Lampang College of Commerce and Technology" in a bold, black, monospace font.
- A group box containing two text input fields:
 - The first field is preceded by the label "Please enter user name". An arrow points from the text "txtuser" to this field.
 - The second field is preceded by the label "Please enter password". An arrow points from the text "txtpassword" to this field.
- At the bottom, there are two buttons: "Login" and "Cancel", each enclosed in its own rectangular frame.

Create Module1

- General Declaration

Public ws As Workspace

Public db As Database

Public login As Recordset

Create Module1

- Create a function

```
Public Sub opendata()
```

```
Set ws = DBEngine.Workspaces(0)
```

```
Set db = ws.OpenDatabase(App.Path & "\test.mdb")
```

```
End Sub
```

Code for form Login

- Double click on form Login

```
Private Sub Form_Load()
```

```
Call opendata
```

```
Set login = db.OpenRecordset('Select * from Teacher')
```

```
End Sub
```

Code for Login

- Double click on Command Button 1

Private Sub Command1_Click()

sqllog = "Select * from Teacher where U_name='" & txtuser & "' and Password='" & txtpassword & "'"

With rslog

If .State = adStateOpen Then .Close

.ActiveConnection = Conn

.Open sqllog

End With

If rslog.RecordCount > 0 Then

MsgBox "Success"

Else

MsgBox "Incorrect Password!!", vbCritical, "Login Failure!!"

End If

End Sub

Code for Cancel

- Double click on Command Button 2

```
Private Sub Command2_Click()
```

```
If MsgBox("Are you sure?", vbQuestion + vbYesNo) = vbYes Then
```

```
End
```

```
Else
```

```
txtuser.SetFocus
```

```
End If
```

```
End Sub
```


Code for KeyAscii

```
Private Sub txtuser_KeyPress(KeyAscii As Integer)
```

```
If KeyAscii = 13 Then
```

```
txtpassword.SetFocus
```

```
End If
```

```
End Sub
```

```
Private Sub txtpassword_KeyPress(KeyAscii As Integer)
```

```
If KeyAscii = 13 Then
```

```
Command1.SetFocus
```

```
End If
```

```
End Sub
```

Module

```
Public Const StrConn = "Provider =  
    Microsoft.jet.OLEDB.4.0; Persist Security  
    Info =False"
```

```
Public ChkFrm As String
```

```
Public Conn As New ADODB.Connection
```

```
Public Sub OpenDB()
```

```
With Conn
```

```
    If .State = adStateOpen Then .Close
```

```
        .ConnectionString = StrConn & ";Data Source=  
" & App.Path & "\test.mdb"
```

```
        .ConnectionTimeout = 90
```

```
        .Open
```

```
End With
```

```
End Sub
```

```
Private Sub Form_Load()
```

```
    Call OpenDB
```

```
End Sub
```

General

Declarations

```
Dim rslog As New ADODB.Recordset
```

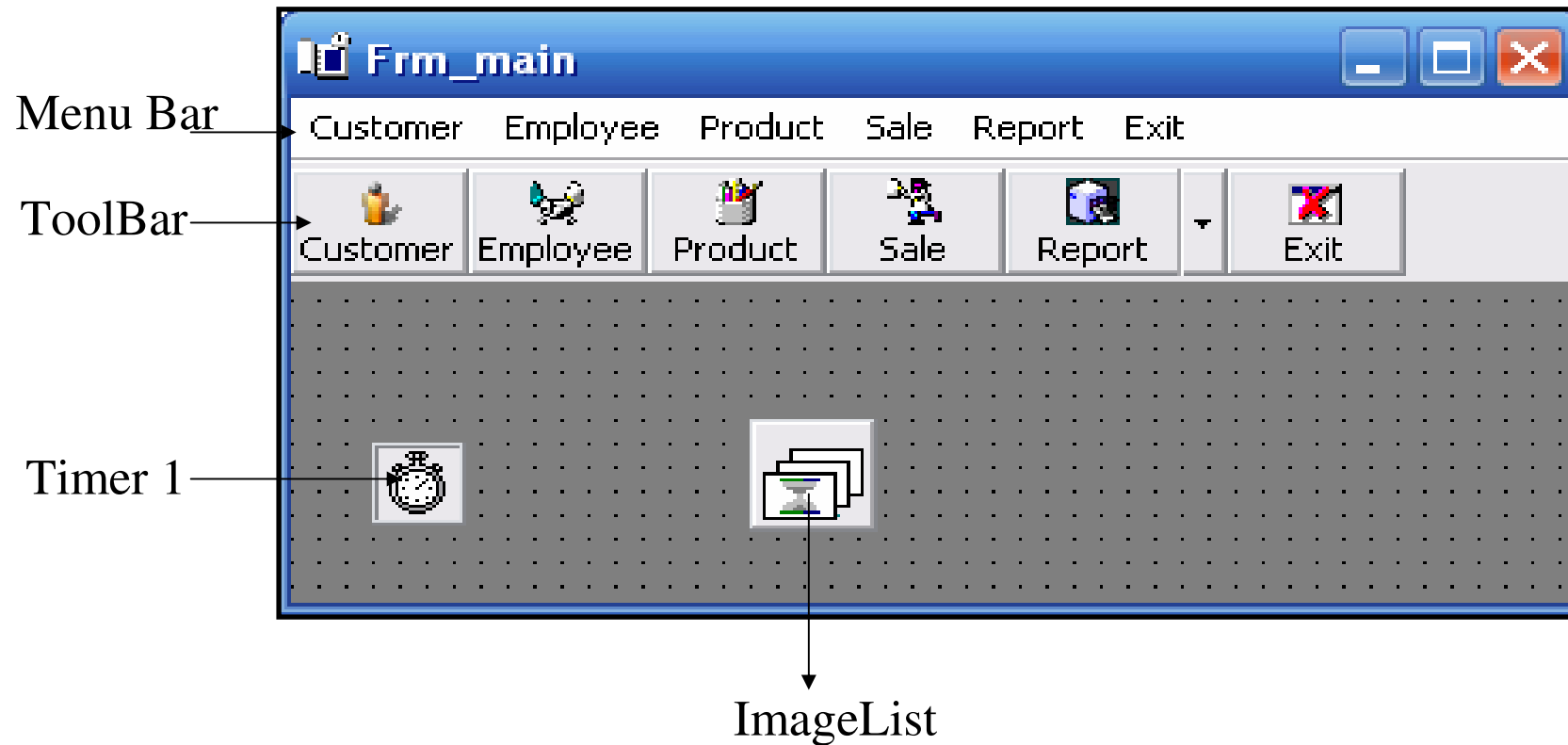
```
Dim sqllog As String
```

Creating an Application Project

Creating an MDI Form

- In Visual Basic 6.0, an MDI Form is a special type of form that acted as a container for an MDI (Multiple Document Interface) application
- To create an MDI Form
 - Click on Project
 - Click on Add MDI Form
 - Click OPEN

Creating a Toolbar



Steps for designing Toolbar

- Right click on the Toolbox
- Click on Components
- Check Microsoft Windows Common Control 6.0 (SP4)
- Double Click on Toolbar
- Double Click on ImageList

Adding Pictures in ImageList

- Select ImageList 1 and right click
- Click on Properties
- Select Images
- Click on Insert Picture
- Select the picture
- Follow the same steps and insert 6 pictures

Adding Pictures in Toolbar

- Right click on the Toolbar 1
- Click on Properties
- In General, ImageList
- Select ImageList 1
- Select Button
- Click on Insert Button

Adding Pictures in Toolbar

- Index 1
 - Caption Customer
 - Image 1
-
- Click again on Insert Button

Adding Pictures in Toolbar

- Index 2
- Caption Employee
- Image 2
- Click again on Insert Button

Adding Pictures in Toolbar

- Index 3
- Caption Product
- Image 3
- Click again on Insert Button

Adding Pictures in Toolbar

- Index 4
 - Caption Sale
 - Image 4
-
- Click again on Insert Button

Adding Pictures in Toolbar

- Index 5
 - Caption Report
 - Image 5
 - Style 5-tbr Dropdown
-
- Click on Insert Button Menu
 - Index 1
 - Text Customer

Adding Pictures in Toolbar

- Click again on Insert Button Menu
- Index 2
- Text Employee
- Click again on Insert Button Menu
- Index 3
- Text Product

Adding Pictures in Toolbar

- Click again on Insert Button Menu
- Index 4
- Text Sale
- Click again on Insert Button

Adding Pictures in Toolbar

- Index 6
- Caption Exit
- Image 6
- Click OK

Code for the Toolbar 1

```
Private Sub Toolbar1_ButtonClick(ByVal Button As MSComctlLib.Button)
```

```
Select Case Button.Index
```

```
Case 1
```

```
    frmcustomer.Show
```

```
    frmcustomer.WindowState = 2
```

```
Case 2
```

```
    frmemployee.Show
```

```
    frmemployee.WindowState = 2
```

```
Case 3
```

```
    frmproduct.Show
```

```
    frmproduct.WindowState = 2
```

```
Case 4
```

```
    frmsale.Show
```

```
    frmsale.WindowState = 2
```

```
Case 6
```

```
    If MsgBox("Do you want to exit ?", vbYesNo + vbCritical, "Exit...") =  
        vbYes Then
```

```
        main.WindowState = 1
```

```
        Unload Me
```

```
    End If
```

```
End Select
```

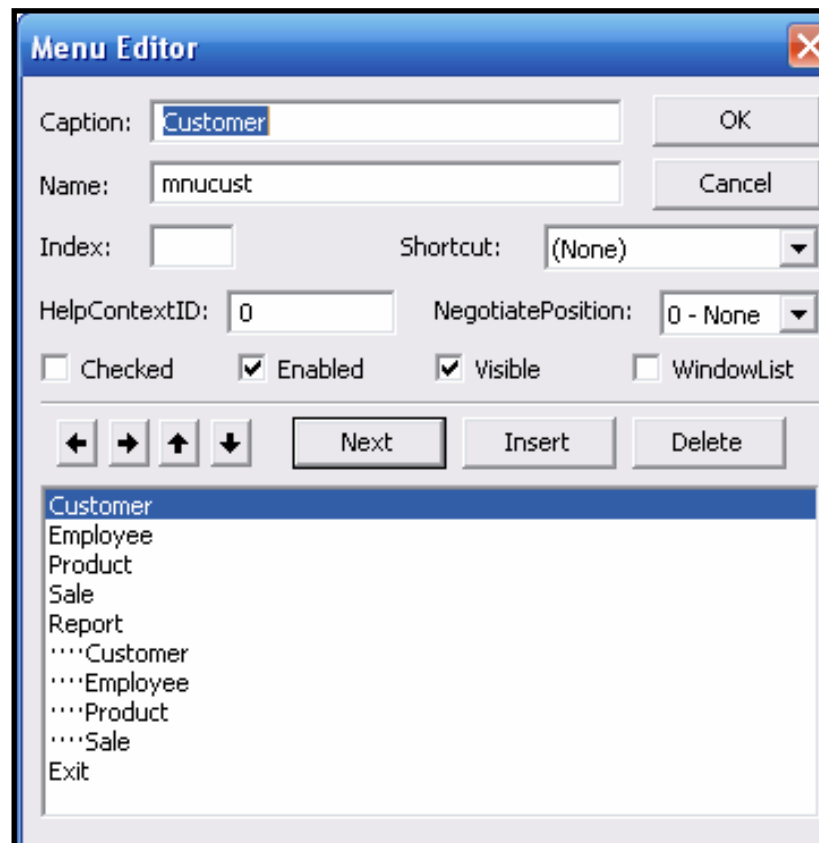
```
End Sub
```

Code for the Toolbar 1 Button Menu

```
Private Sub Toolbar1_ButtonMenuClick(ByVal  
    ButtonMenu As MSComctlLib.ButtonMenu)  
Select Case ButtonMenu.Index  
    Case 1  
        rpt_cus.Show  
    Case 2  
        rpt_emp.Show  
    Case 3  
        rpt_pro.Show  
    Case 4  
        rpt_sale.Show  
End Select  
End Sub
```

Designing a Menu bar

- Click on the Menu Editor in the Toolbar



Code for Menu bar

```
Private Sub mnucust_Click()  
    frmcustomer.Show  
    frmcustomer.WindowState = 2  
End Sub
```

```
Private Sub mnuemp_Click()  
    frmemployee.Show  
    frmemployee.WindowState = 2  
End Sub
```

Code for Menu bar

```
Private Sub mnuexit_Click()  
    If MsgBox("Do you want to exit ?", vbYesNo  
+ vbCritical, "Exit...") = vbYes Then  
        frm_main.WindowState = 1  
        Unload Me  
    End If  
End Sub
```

```
Private Sub mnupro_Click()  
    frmproduct.Show  
    frmproduct.WindowState = 2  
End Sub
```


Code for Menu bar

```
Private Sub mnurptcust_Click()  
    frmrptcus.Show  
End Sub
```

```
Private Sub mnurptemp_Click()  
    frmrptemp.Show  
End Sub
```

```
Private Sub mnurptpro_Click()  
    frmrptpro.Show  
End Sub
```

```
Private Sub mnurptsale_Click()  
    frmrptsale.Show  
End Sub
```

```
Private Sub mnusale_Click()  
    frmsale.Show  
    frmproduct.WindowState = 2  
End Sub
```

Code for Timer1

```
Private Sub Timer1_Timer()  
    Timer1.Interval = 0  
    frmlogin.Show  
End Sub
```

Forms

- MDI form
- Form1
- Form2
- Form3
- Form4
- Form5
- Form6
- Form7
- Form8









FormNames

Main
FrmCustomer
FrmEmployee
FrmProduct
FrmSale
FrmRptCus
FrmRptEmp
FrmRptPro
FrmRptSale1

Database in MS-ACCESS

- Database name database.mdb
- Table1 name Customer
- Table2 name Employee
- Table3 name Product
- Table4 name Loginname
- Table5 name Sale
- Table6 name SaleDetail

FrmCustomer

Code	<input type="text"/>	<input type="button" value="<<"/>		<input type="button" value="<"/>	<input type="button" value=">"/>	<input type="button" value=">>"/>				
Title	<input type="text"/>	First Name	<input type="text"/>	Last name	<input type="text"/>					
Address	<input type="text"/>		Telephone	<input type="text"/>						
<div><div> Add</div><div> Edit</div><div> Del</div><div> Find</div><div> Save</div><div> Cancel</div><div> Print</div><div> Exit</div></div>										
<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>										

Code FrmCustomer

General Declarations

```
Dim rscus As New ADODB.Recordset  
Dim sqlcus As String  
Dim chkclick As String  
Dim nrow As Integer
```

Code FrmCustomer

```
Private Sub Form_Load()
```

```
Call openrs
```

```
If rscus.RecordCount = 1 Then MsgBox ""
```

```
Call showdata
```

```
Call unlockcmd
```

```
Call locktxt
```

```
Call showgridcus
```

```
End Sub
```

Code FrmCustomer

```
Private Sub showdata()
```

```
With rscus
```

```
txtid.Text = .Fields("cus_id")
```

```
cmbfname.Text = .Fields("cus_fname")
```

```
txtname.Text = .Fields("cus_name")
```

```
txtlname.Text = .Fields("cus_lname")
```

```
txtadd.Text = .Fields("cus_add")
```

```
txttel.Text = .Fields("cus_tel")
```

```
End With
```

```
End Sub
```


Code FrmCustomer

```
Private Sub cleartxt()  
txtid.Text = "__-__"  
cmbfname.Text = ""  
txtname.Text = ""  
txtlname = ""  
txtadd.Text = ""  
txttel.Text = "__-____-__"  
End Sub
```

Code FrmCustomer

```
Private Sub locktxt()  
txtid.Enabled = False  
cmbfname.Enabled = False  
txtname.Enabled = False  
txtlname.Enabled = False  
txtadd.Enabled = False  
txttel.Enabled = False  
End Sub
```

Code FrmCustomer

```
Private Sub unlocktxt()  
txtid.Enabled = True  
cmbfname.Enabled = True  
txtname.Enabled = True  
txtlname.Enabled = True  
txtadd.Enabled = True  
txttel.Enabled = True  
End Sub
```

Code FrmCustomer

```
Private Sub lockcmd()  
cmdadd.Enabled = False  
cmdedit.Enabled = False  
cmddel.Enabled = False  
cmdfind.Enabled = False  
cmdsave.Enabled = True  
cmdcancel.Enabled = True  
cmdexit.Enabled = False  
cmdfirst.Enabled = False  
cmdback.Enabled = False  
cmdnext.Enabled = False  
cmdlast.Enabled = False  
gridcus.Enabled = False  
End Sub
```

Code FrmCustomer

```
Private Sub unlockcmd()  
cmdadd.Enabled = True  
cmdedit.Enabled = True  
cmddel.Enabled = True  
cmdfind.Enabled = True  
cmdsave.Enabled = False  
cmdcancel.Enabled = False  
cmdexit.Enabled = True  
cmdfirst.Enabled = True  
cmdback.Enabled = True  
cmdnext.Enabled = True  
cmdlast.Enabled = True  
gridcus.Enabled = True  
End Sub
```

```
Code    FrmCustomer  
Private Sub cmbfname_Click()  
If chkclick = "Add" Then  
    txtname.SetFocus  
End If  
End Sub
```

Code FrmCustomer

```
Private Sub cmbfname_KeyPress(KeyAscii As Integer)  
Select Case KeyAscii  
Case 13  
txtname.SetFocus  
End Select  
End Sub
```

Code FrmCustomer

```
Private Sub cmdadd_Click()  
chkclick = "Add"  
Call unlocktxt  
Call lockcmd  
Call cleartxt  
Call idauto  
Call listcmb  
cmbfname.SetFocus  
End Sub
```


Code FrmCustomer

```
Private Sub idauto()  
If rscus.RecordCount = 0 Then  
id = "001"  
id1 = Right(Year(Date) + 543, 2)  
txtid.Text = id1 & "_" & id  
txtid.Enabled = False  
Else  
rscus.MoveLast  
id = Format(Val(Right(rscus.Fields("cus_id"), 3)) + 1, "000")  
id1 = Right(Year(Date) + 543, 2)  
txtid.Text = id1 & "_" & id  
txtid.Enabled = False  
End If  
End Sub
```

Code FrmCustomer

```
Private Sub cmdback_Click()  
rscus.MovePrevious  
If rscus.BOF Then  
rscus.MoveFirst  
End If  
Call showdata  
End Sub
```

Code FrmCustomer

```
Private Sub cmdcancel_Click()
```

```
Call showdata
```

```
Call locktxt
```

```
Call unlockcmd
```

```
chkclick = ""
```

```
End Sub
```

Code FrmCustomer

```
Private Sub cmdDel_Click()  
If MsgBox("Are you sure?", vbCritical + vbYesNo, "Delete")  
    = vbYes Then  
    rscus.Delete  
    MsgBox "Record Deleted!!", vbInformation, "Delete Success"  
    rscus.MoveNext  
    If rscus.EOF Then  
        rscus.MoveLast  
    End If  
    Call showdata  
    Call showgridcus  
    End If  
End Sub
```

Code FrmCustomer

```
Private Sub cmdedit_Click()
```

```
chkclick = "Edit"
```

```
Call unlocktxt
```

```
Call lockcmd
```

```
Call listcmb
```

```
txtid.Enabled = False
```

```
cmbfname.SetFocus
```

```
End Sub
```

Code FrmCustomer

```
Private Sub cmdexit_Click()
```

```
Unload Me
```

```
End Sub
```

Code FrmCustomer

```
Private Sub cmdfind_Click()  
ChkFrm = "frmcus"  
frmlist_cus.Show  
End Sub
```

Code FrmCustomer

```
Private Sub cmdfirst_Click()  
rscus.MoveFirst  
Call showdata  
End Sub
```


Code FrmCustomer

```
Private Sub cmdlast_Click()  
rscus.MoveLast  
Call showdata  
End Sub
```

Code FrmCustomer

```
Private Sub cmdnext_Click()  
On Error Resume Next  
rscus.MoveNext  
If rscus.EOF Then  
rscus.MoveLast  
End If  
Call showdata  
End Sub
```

Code FrmCustomer

```
Private Sub cmdprint_Click()  
frmrpt_cus.Show  
frmrpt_cus.WindowState = 2  
End Sub
```

Code FrmCustomer

Private Sub openrs()

Call OpenDB

sqlcus = "Select * from customer order by Cus_id"

With rscus

If .State = adStateOpen Then .Close

.ActiveConnection = Conn

.CursorType = adOpenForwardOnly

.CursorLocation = adUseClient

.LockType = adLockOptimistic

.Open sqlcus

End With

End Sub

Code FrmCustomer

```
Private Sub cmdsave_Click()  
If txtid.Text = "____" Then  
MsgBox "Please enter txtid", vbCritical, "Error"  
txtid.SetFocus  
txtid.SelStart = 0  
txtid.SelLength = Len(txtid.Text)  
Exit Sub  
End If  
If txtname.Text = "" Then  
MsgBox "Please enter name", vbCritical, "Error"  
txtname.Text = ""  
txtname.SetFocus  
Exit Sub  
End If
```

Code FrmCustomer

```
If txtlname.Text = "" Then  
MsgBox "Please enter lastname", vbCritical, "Error"  
txtlname.Text = ""  
txtlname.SetFocus  
Exit Sub  
End If  
If txtadd.Text = "" Then  
MsgBox "Please enter address", vbCritical, "Error"  
txtadd.Text = ""  
txtadd.SetFocus  
Exit Sub  
End If
```

Code FrmCustomer

```
If MsgBox("Are you sure?", vbQuestion + vbYesNo, "Save") =  
    vbYes Then  
If chkclick = "Add" Then  
sqlcus = "insert into customer (cus_id, cus_fname, cus_name,  
    cus_lname, cus_add, cus_tel)"  
sqlcus = sqlcus & " values ('" & txtid.Text & "', '" & cmbfname.Text  
    & "', '" & txtname.Text & "', '" & txtlname.Text & "', '" &  
    txtadd.Text & "', '" & txttel.Text & "')"  
Conn.Execute (sqlcus)  
MsgBox "Save Completed", vbInformation, "Save"  
Call unlockcmd  
Call locktxt  
Call showgridcus
```

Code FrmCustomer

```
ElseIf chkclick = "Edit" Then  
sqlcus = "Update customer set Cus_Fname =" &  
    cmbfname.Text & "','"  
sqlcus = sqlcus & "Cus_Name =" & txtname.Text & "','"  
sqlcus = sqlcus & "Cus_Lname =" & txtlname.Text & "','"  
sqlcus = sqlcus & "Cus_Add =" & txtadd.Text & "','"  
sqlcus = sqlcus & "Cus_Tel =" & txttel.Text & ""'"  
sqlcus = sqlcus & "Where Cus_id =" & txtid.Text & ""'"  
Conn.Execute (sqlcus)  
MsgBox "Edit Completed", vbInformation, "Edit"
```


Code FrmCustomer

```
Call unlockcmd  
Call locktxt  
Call openrs  
Call showgridcus  
End If  
End If  
End Sub
```

Code FrmCustomer

```
Private Sub gridcus_DblClick()  
nrow = gridcus.Row  
txtid.Text = gridcus.TextMatrix(nrow, 1)  
rscus.MoveFirst  
rscus.Find "(cus_id='" & txtid.Text & "')" "  
If Not rscus.EOF Then  
ChkFrm = ""  
Call showdata  
End If  
End Sub
```

Code FrmCustomer

```
Private Sub txtadd_KeyPress(KeyAscii As Integer)  
Select Case KeyAscii  
Case 13  
txttel.SetFocus  
End Select  
End Sub
```

Code FrmCustomer

```
Private Sub txtid_Change()  
If ChkFrm = "frmcus" Then  
Call openrs  
rscus.MoveFirst  
rscus.Find "(cus_id='" & txtid.Text & "')  
If Not rscus.EOF Then  
ChkFrm = ""  
Call showdata  
End If  
End If  
End Sub
```

Code FrmCustomer

```
Private Sub txtid_KeyPress(KeyAscii As Integer)
```

```
Select Case KeyAscii
```

```
Case 13
```

```
Call listcmb
```

```
cmbfname.SetFocus
```

```
Case 48 To 57, 8
```

```
Case Else
```

```
KeyAscii = 0
```

```
End Select
```

```
End Sub
```

Code FrmCustomer

```
Private Sub listcmb()  
cmbfname.Clear  
With cmbfname  
.AddItem "Mr"  
.AddItem "Miss"  
.AddItem "Mrs"  
.ListIndex = 0  
End With  
cmbfname.SetFocus  
End Sub
```

Code FrmCustomer

```
Private Sub txtlname_KeyPress(KeyAscii As Integer)  
Select Case KeyAscii  
Case 13  
txtadd.SetFocus  
cmbfname.SetFocus  
Case 48 To 57  
KeyAscii = 0  
End Select  
End Sub
```

Code FrmCustomer

```
Private Sub txtname_KeyPress(KeyAscii As Integer)  
Select Case KeyAscii  
Case 13  
txtname.SetFocus  
Case 48 To 57  
KeyAscii = 0  
End Select  
End Sub
```


Code FrmCustomer

```
Private Sub txttel_GotFocus()  
txttel.Text = "__-____-____"  
txttel.SetFocus  
txttel.SelStart = 0  
txttel.SelLength = Len(txttel.Text)  
End Sub
```

Code FrmCustomer

```
Private Sub txttel_KeyPress(KeyAscii As Integer)  
Select Case KeyAscii  
Case 13  
cmdsave.SetFocus  
Case 48 To 57, 8  
Case Else  
KeyAscii = 0  
End Select  
End Sub
```

Code FrmCustomer

```
Private Sub setgridcus()  
With gridcus  
  .Clear  
  .Rows = 2  
  .Cols = 5  
  .ColWidth(0) = 700  
  .ColWidth(1) = 1000  
  .ColWidth(2) = 3000  
  .ColWidth(3) = 3000  
  .ColWidth(4) = 1500  
  .ColAlignment(0) = 4  
  .ColAlignment(1) = 4  
  .ColAlignment(2) = 2  
  .ColAlignment(3) = 2  
  .ColAlignment(4) = 4  
  .TextMatrix(0, 0) = "No"  
  .TextMatrix(0, 1) = "Id"  
  .TextMatrix(0, 2) = "Full name"  
  .TextMatrix(0, 3) = "Address"  
  .TextMatrix(0, 4) = "Telephone"  
End With  
End Sub
```

Code FrmCustomer

Private Sub showgridcus()

Call setgridcus

sqlcus = "Select * from customer order by cus_id"

With rscus

If .State = adStateOpen Then .Close

.ActiveConnection = Conn

.CursorType = adOpenForwardOnly

.CursorLocation = adUseClient

.LockType = adLockOptimistic

.Open sqlcus

End With



Code FrmCustomer



```
nrow = 1  
rscus.MoveFirst  
Do Until rscus.EOF  
With gridcus  
.TextMatrix(nrow, 0) = nrow  
.TextMatrix(nrow, 1) = rscus.Fields("cus_id")  
.TextMatrix(nrow, 2) = rscus.Fields("cus_fname") &  
    rscus.Fields("cus_name") & rscus.Fields("cus_lname")  
.TextMatrix(nrow, 3) = rscus.Fields("cus_add")  
.TextMatrix(nrow, 4) = rscus.Fields("cus_tel")  
rscus.MoveNext  
nrow = nrow + 1  
If nrow >= .Rows Then  
.Rows = .Rows + 1  
End If  
End With  
Loop  
End Sub
```



Formname: frmrpt_cus

View Customer Report

From To

txtstart  txtend 

 **Print**  **Close**

 cmdprint1  cmdclose

Code for cmdprint1

- **Double click on Command Button cmdprint1**

Private Sub cmdprint1_Click()

If (txtstart.Text = "__-__") Or (txtend.Text = "__-__") Then

txtstart.SetFocus

Exit Sub

End If

With DataEnvironment1

If .Connection1.State = adStateOpen Then .Connection1.Close

.command1 txtstart.Text, txtend.Text

rptcus.Show

End With

End Sub

Data Environment

- Click on Project in the menu bar
- Click on Add Data Environment
- Right click on Connection 1
- Select Microsoft Jet 4.0 OLE DB Provider
- Click on Next
- Select the Database name
- Click on Test Connection
- Click OK

Command 1

- Right Click on Connection 1
- Click on Add Command
- Right Click on Command 1
- Click on Properties
- Select SQL Statement
- Type,

select * from customer where cus_id between ? and ?

- Click OK

Data Report

- Click on Project in the Menu Bar
- Click on Add Data Report
- Name: rptcus

DataReport1

Report Header (Section4)

Customer Info

Page Header (Section2)

Id	Title	First	Last Name	Address	Phone
-----------	--------------	--------------	------------------	----------------	--------------

Detail (Section1)

Cus_id [comm	Cus_F name	Cus_Name [command1]	Cus_Lname [command1]	Cus_Add [command1]	Cus_Add [comman
------------------------	----------------------	-------------------------------	--------------------------------	------------------------------	---------------------------

Page Footer (Section3)

Report Footer (Section5)

Annotations:

- RptLabel points to the **Customer Info** label in the Report Header.
- RptLabel points to the **Id** header in the Page Header table.
- RptTextbox points to the **Cus_id** header in the Detail table.

Connecting Data Report

- In the Property of Data Report1 rptcus
- Data Source Data Environment 1
- Data Member Command 1
- In the property of Text1
- Data Member Command1
- Data Field Cus_id
- In the property of Text2
- Data Member Command1
- Data Field Cus_Fname

Connecting Data Report

- In the property of Text3
 - Data Member Command1
 - Data Field Cus_Name
- In the property of Text4
 - Data Member Command1
 - Data Field Cus_Lname
- In the property of Text5
 - Data Member Command1
 - Data Field Cus_Add

Connecting Data Report

- In the property of Text6
- Data Member Command1
- Data Field Cus_Tel

Find

- Double Click on Command Button cmdFind

```
Private Sub cmdfind_Click()
```

```
ChkFrm = "frmcus"
```

```
frmlist_cus.Show
```

```
End Sub
```

Form Name frmlist_cus

The image shows a screenshot of a form titled "frmlist_cus". The form has a light gray background with a dotted grid pattern. At the top, there are three controls: a dropdown menu labeled "cmbfind", a text box labeled "txtfind1", and a button labeled "Close". An arrow points from the "Close" button to the text "cmdclose". Below these controls is a large gray rectangular area labeled "grid1" with an arrow pointing to it. The grid area contains a small table with two columns and two rows.

Code

- General Declarations

```
Dim rscus As New ADODB.Recordset
```

```
Dim nrow As Integer
```

```
Dim sqlcus As String
```


- Double Click on cmbfind change to click

```
Private Sub cmbfind_Click()
```

```
Select Case cmbfind.ListIndex
```

```
Case 0
```

```
    txtfind.Visible = True
```

```
    txtfind1.Visible = False
```

```
    txtfind.Text = "__-__"
```

```
    txtfind.SetFocus
```

```
    txtfind.SelStart = 0
```

```
Case 1
```

```
    txtfind1.Visible = True
```

```
    txtfind.Visible = False
```

```
    txtfind1.Text = ""
```

```
    txtfind1.SetFocus
```

```
    txtfind1.SelStart = 0
```

```
Case 2
```

```
    Call showall
```

```
    Call showgrid1
```

```
End Select
```

```
End Sub
```

Double click on cmdclose

```
Private Sub cmdclose_Click()
```

```
Unload Me
```

```
End Sub
```

Double Click on Form

```
Private Sub Form_Load()
```

```
    Call OpenDB
```

```
    Call showall
```

```
    Call listcmb
```

```
    Call showgrid1
```

```
End Sub
```

- Double click on txtfind change to GotFocus

```
Private Sub txtfind_GotFocus()
```

```
    txtfind.Text = "__-__"
```

```
    txtfind.SetFocus
```

```
    txtfind.SelStart = 0
```

```
    txtfind.SelLength = Len(txtfind.Text)
```

```
End Sub
```

```
Private Sub txtfind_keypress(KeyAscii As Integer)
If KeyAscii = 13 Then
sqlcus = "Select * from customer where cus_id like '" & txtfind.Text & "'"
With rscus
If .State = adStateOpen Then .Close
.ActiveConnection = Conn
.CursorType = adOpenForwardOnly
.CursorLocation = adUseClient
.Open sqlcus
End With
If rscus.RecordCount > 0 Then
Call showgrid1
Else
MsgBox "Not found" & txtfind.Text & "'", vbCritical, "Find"
txtfind.SetFocus
txtfind.SelStart = 0
txtfind.SelLength = Len(txtfind)
Exit Sub
End If
End If
End Sub
```

```
Private Sub txtfind1_Change()  
If cmbfind.Text = "Name" Then  
sqlcus = "select * from customer where Cus_Name  
like '%" & txtfind1.Text & "%'"  
With rscus  
If .State = adStateOpen Then .Close  
.ActiveConnection = Conn  
.CursorType = adOpenForwardOnly  
.CursorLocation = adUseClient  
.Open sqlcus  
End With  
If rscus.RecordCount > 0 Then  
Call showgrid1  
End If  
End If  
End Sub
```

```
Private Sub txtfind1_KeyPress(KeyAscii As Integer)
If KeyAscii = 13 Then
  sqlcus = "Select * from customer where cus_id like '" & txtfind.Text
    & "'"
  With rscus
    If .State = adStateOpen Then .Close
    .ActiveConnection = Conn
    .CursorType = adOpenForwardOnly
    .CursorLocation = adUseClient
    .Open sqlcus
  End With
  If rscus.RecordCount > 0 Then
    Call showgrid1
  Else
    MsgBox "Not found" & txtfind.Text & "'", vbCritical, "Find"
  End Sub
End If
End If
End Sub
```

```
Private Sub showall()  
sqlcus = "select * from customer order by cus_id"  
With rscus  
If .State = adStateOpen Then .Close  
.ActiveConnection = Conn  
.CursorType = adOpenForwardOnly  
.CursorLocation = adUseClient  
.Open sqlcus  
End With  
End Sub
```



```
Private Sub setgrid1()  
With grid1  
  .Clear  
  .Rows = 2  
  .Cols = 3  
  .ColWidth(0) = 700  
  .ColWidth(1) = 1000  
  .ColWidth(2) = 2000  
  .ColAlignment(0) = 4  
  .ColAlignment(1) = 4  
  .ColAlignment(2) = 2  
  .TextMatrix(0, 0) = "No"  
  .TextMatrix(0, 1) = "Id"  
  .TextMatrix(0, 2) = "Name"  
End With  
End Sub
```

Private Sub showgrid1()

Call setgrid1

Do While Not rscus.EOF

With grid1

nrow = .Rows - 1

.TextMatrix(nrow, 0) = nrow

.TextMatrix(nrow, 1) = rscus.Fields("cus_id")

**.TextMatrix(nrow, 2) = rscus.Fields("cus_fname") &
rscus.Fields("cus_name") & rscus.Fields("cus_lname")**

rscus.MoveNext

.Rows = .Rows + 1

End With


Loop

End Sub

```
Private Sub listcmb()  
With cmbfind  
.AddItem "Code"  
.AddItem "Name"  
.AddItem "Display All"  
.Text = "Find"  
End With  
txtfind.Visible = True  
txtfind1.Visible = False  
txtfind.Text = "___-___"  
txtfind1.Text = ""  
End Sub
```

New Project

- Make a table in Access
- Database name: Grade
- Table name: Grade

	Field Name	Data Type
	Grade_no	Number
	Student_code	Text
	Subject_code	Text
	Teacher_code	Text
	Test1_score	Number
	Test2_score	Number
	Midterm_score	Number
	Final_score	Number
	Total	Number
	Grade	Number

- Enter 2 records

Create a new Project in VB

- **Project name: Grade**
- **Form name: Grade**

The screenshot shows a Visual Basic form titled "Grade". The form has a light gray background and a dotted border. It contains several input fields and buttons. At the top, there are four input fields: "Grade No" (txtgradeno), "Student code" (txtstudent), "Subject code" (txtsubject), and "Teacher code" (txtteacher). Below these, there is a horizontal line. Under the line, there are five input fields: "Test 1" (txttest1), "Test 2" (txttest2), "Mid-Term" (txtmidterm), and "Final" (txtfinal). Below these, there are two input fields: "Total" (txttotal) and "Grade" (txtg). To the right of the "Grade" field is a "Check" button. At the bottom of the form, there is a navigation bar with four buttons: "<<", "<", ">", and ">>". Below the navigation bar, there is a toolbar with six buttons: "Add" (with a red folder icon), "Del" (with a trash can icon), "Save" (with a floppy disk icon), "Print" (with a printer icon), "Find" (with a magnifying glass icon), and "Exit" (with a blue arrow icon).

Grade No	txtgradeno	Student code	txtstudent
Subject code	txtsubject	Teacher code	txtteacher

Test 1	txttest1	Test 2	txttest2	Mid-Term	txtmidterm	Final	txtfinal
Total	txttotal	Grade	txtg	Check			

<< < > >>

Add Del Save Print Find Exit

Change the names of Command Buttons

- **Command1** **cmdcheck**
- **Command2** **cmdfirst**
- **Command3** **cmdback**
- **Command4** **cmdnext**
- **Command5** **cmdlast**
- **Command6** **cmdadd**
- **Command7** **cmddel**
- **Command8** **cmdsave**
- **Command9** **cmdprint**
- **Command10** **cmdfind**
- **Command11** **cmdexit**

Add Module

- Click on Project in menu bar
- Click on AddModule

```
Public Const StrConn = "Provider=Microsoft.Jet.OLEDB.4.0;Persist Security  
Info=False"
```

```
Public ChkFrm As String
```

```
Public Conn As New ADODB.Connection
```

```
Public Sub OpenDB()
```

```
With Conn
```

```
    If .State = adStateOpen Then .Close
```

```
        .ConnectionString = StrConn & ";Data Source= " & App.Path &  
        "\grade.mdb"
```

```
        .ConnectionTimeout = 90
```

```
        .Open
```

```
End With
```

```
End Sub
```

Form Grade

- General Declarations

```
Dim rsgrade As New ADODB.Recordset  
Dim sqlgrade As String  
Dim chkclick As String
```


Function Openrs()

Private Sub openrs()

Call OpenDB

sqlgrade = "Select * from grade order by grade_no"

With rsgrade

If .State = adStateOpen Then .Close

.ActiveConnection = Conn

.CursorType = adOpenForwardOnly

.CursorLocation = adUseClient

.LockType = adLockOptimistic

.Open sqlgrade

End With

End Sub

Function showdata()

Private Sub showdata()

With rsgrade

txtgradeno.Text = .Fields("grade_no")

txtstudent.Text = .Fields("student_code")

txtsubject.Text = .Fields("subject_code")

txtteacher.Text = .Fields("teacher_code")

txttest1.Text = .Fields("Test1_score")

txttest2.Text = .Fields("Test2_score")

txtmidterm.Text = .Fields("Midterm_score")

txtfinal.Text = .Fields("final_score")

txttotal.Text = .Fields("total")

txtg.Text = .Fields("grade")

End With

End Sub

Function Autoid()

```
Private Sub idauto()  
If rsgrade.RecordCount = 0 Then  
id = 1  
txtgradeno.Text = id  
Else  
rsgrade.MoveLast  
id = rsgrade.Fields("grade_no") + 1  
txtgradeno.Text = id  
txtgradeno.Enabled = False  
End If  
End Sub
```

Function Cleartext()

```
Private Sub cleartxt()  
txtgradeno.Text = ""  
txtstudent.Text = ""  
txtsubject.Text = ""  
txtteacher.Text = ""  
txttest1.Text = ""  
txttest2.Text = ""  
txtmidterm.Text = ""  
txtfinal.Text = ""  
txttotal.Text = ""  
txtg.Text = ""  
End Sub
```

Form Load

- Double click on Form

Private Sub Form_Load()

Call openrs

Call showdata

End Sub

Private Sub cmdcheck_Click()

txttotal = Val(txttest1) + Val(txttest2) + Val(txtmidterm) + Val(txtfinal)

If txttotal >= 80 And txttotal <= 100 Then

txtg = 4

ElseIf txttotal >= 70 And txttotal <= 79 Then

txtg = 3

ElseIf txttotal >= 60 And txttotal <= 69 Then

txtg = 2

ElseIf txttotal >= 50 And txttotal <= 59 Then

txtg = 1

ElseIf txttotal >= 0 And txttotal <= 49 Then

txtg = 0

Else

MsgBox "Incorrect Total", vbCritical

End If

End Sub

```
Private Sub cmdfirst_Click()  
    rsgrade.MoveFirst  
    Call showdata  
End Sub
```

```
Private Sub cmdback_Click()  
    rsgrade.MovePrevious  
    If rsgrade.BOF Then  
        rsgrade.MoveFirst  
    End If  
    Call showdata  
End Sub
```

```
Private Sub cmdnext_Click()  
On Error Resume Next  
    rsgrade.MoveNext  
    If rsgrade.EOF Then  
        rsgrade.MoveLast  
    End If  
    Call showdata  
End Sub
```

```
Private Sub cmdlast_Click()  
    rsgrade.MoveLast  
    Call showdata  
End Sub
```



```
Private Sub cmdadd_Click()
```

```
chkclick = "Add"
```

```
Call cleartxt
```

```
Call idauto
```

```
End Sub
```

```
Private Sub cmddel_Click()
```

```
If MsgBox("Are you sure?", vbCritical + vbYesNo, "Delete") = vbYes  
Then
```

```
rsgrade.Delete
```

```
MsgBox "Record Deleted!!", vbInformation, "Delete Success"
```

```
rsgrade.MoveNext
```

```
If rsgrade.EOF Then
```

```
rsgrade.MoveLast
```

```
End If
```

```
Call showdata
```

```
End If
```

```
End Sub
```

```
Private Sub cmdsave_Click()  
If MsgBox("Are you sure?", vbQuestion + vbYesNo,  
    "Save") = vbYes Then  
If chkclick = "Add" Then  
sqlgrade = "Insert into grade (Grade_no,  
    student_code,subject_code,teacher_code, test1_score,  
    test2_score,midterm_score, final_score,total,grade)"  
sqlgrade = sqlgrade & " values ('" & txtgradeno.Text & "','"  
    & txtstudent & "','" & txtsubject & "','" & txtteacher & '"  
    '" & txttest1 & "','" & txttest2 & "','" & txtmidterm & '"  
    '" & txtfinal & "','" & txttotal & "','" & txtg & "'))"  
Conn.Execute (sqlgrade)  
MsgBox "Save Completed", vbInformation, "Save"  
End If  
End If  
End Sub
```

```
Private Sub cmdprint_Click()  
With DataEnvironment1  
If .Connection1.State = adStateOpen Then .Connection1.Close  
.Command1_grouping txtstudent.Text  
DataReport1.Show  
End With  
End Sub
```

```
Private Sub cmdfind_Click()  
Find = InputBox("Enter grade no")  
sqlgrade = "Select * from grade where grade_no like '" & Find & "'"  
With rsgrade  
If .State = adStateOpen Then .Close  
.ActiveConnection = Conn  
.CursorType = adOpenForwardOnly  
.CursorLocation = adUseClient  
.Open sqlgrade  
End With  
If rsgrade.RecordCount > 0 Then  
Call showdata  
Else  
MsgBox "Not found record no = " & Find & "'", vbCritical, "Find"  
Exit Sub  
End If  
End Sub
```

Group By Report

Grade Report

Student Code	1
---------------------	----------

Subject Code	1
---------------------	----------

Test1	1
--------------	----------

Test2	1
--------------	----------

Mid-Term	1
-----------------	----------

Final	1
--------------	----------

Total	1
--------------	----------

Grade	2
--------------	----------

Subject Code	2
---------------------	----------

Test1	30
--------------	-----------

Test2	20
--------------	-----------

Mid-Term	0
-----------------	----------

Final	15
--------------	-----------

Total	65
--------------	-----------

Grade	2
--------------	----------









G.P.A. =	2
-----------------	----------

Assignment 2

- Create a table in MS-ACCESS

	Field Name	Data Type
Ⓚ	No	Number
	S_Code	Text
	B_Code	Text
	Date_Borrow	Date/Time
	Date_Return	Date/Time
	Fine	Currency

Assignment 2

Lampang College of Commerce and Technology							
Independent Study Center (ISC)							
ISC System							
No.	<input type="text" value="txtno"/>	Student Code	<input type="text" value="txtscore"/>				
		Book Code	<input type="text" value="txtbcode"/>				
Date - of - Borrow	<input type="text" value="txtborrow"/>	Date - of - Return	<input type="text" value="txtreturn"/>				
Late Fine	<input type="text" value="txtfine"/>	Baht	<input type="button" value="Check Late"/> → Cmdlate				
<div><input type="button" value=" <<"/> <input type="button" value="<"/> <input type="button" value=">"/> <input type="button" value=">> "/></div>							
 Add	 Edit	 Del	 Find				
 Save	 Cancel	 Print	 Exit				
<table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>							

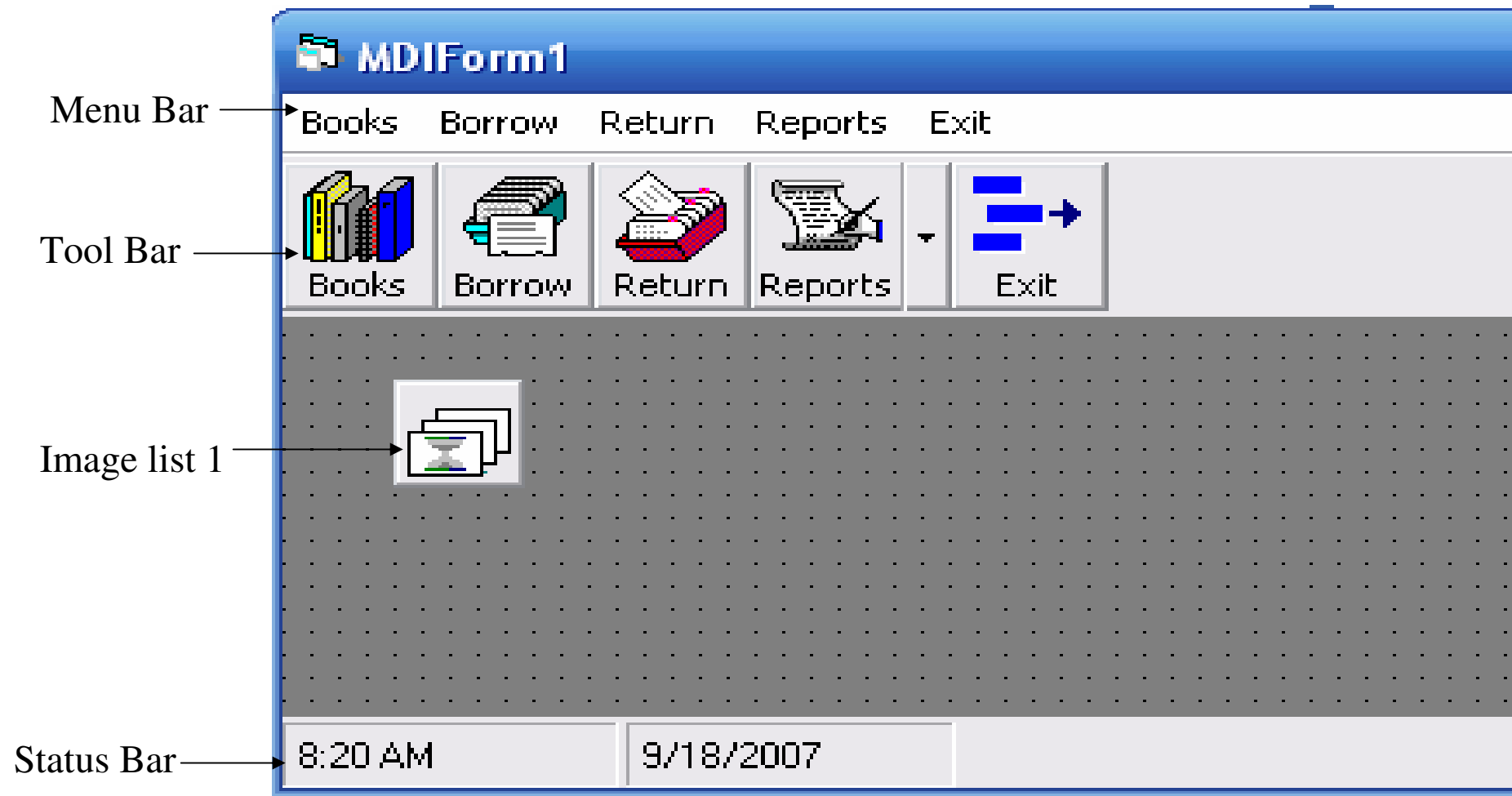
Double Click on Cmdlate

```
Private Sub cmdlate_Click()  
fine = DateDiff("d", txtborrow, txtreturn)  
If fine > 7 Then  
    MsgBox "Late..!!", vbCritical  
    txtfine = (fine - 7) * 5  
Else  
    MsgBox "Not late..!!", vbInformation  
    txtfine = 0  
End If  
End Sub
```

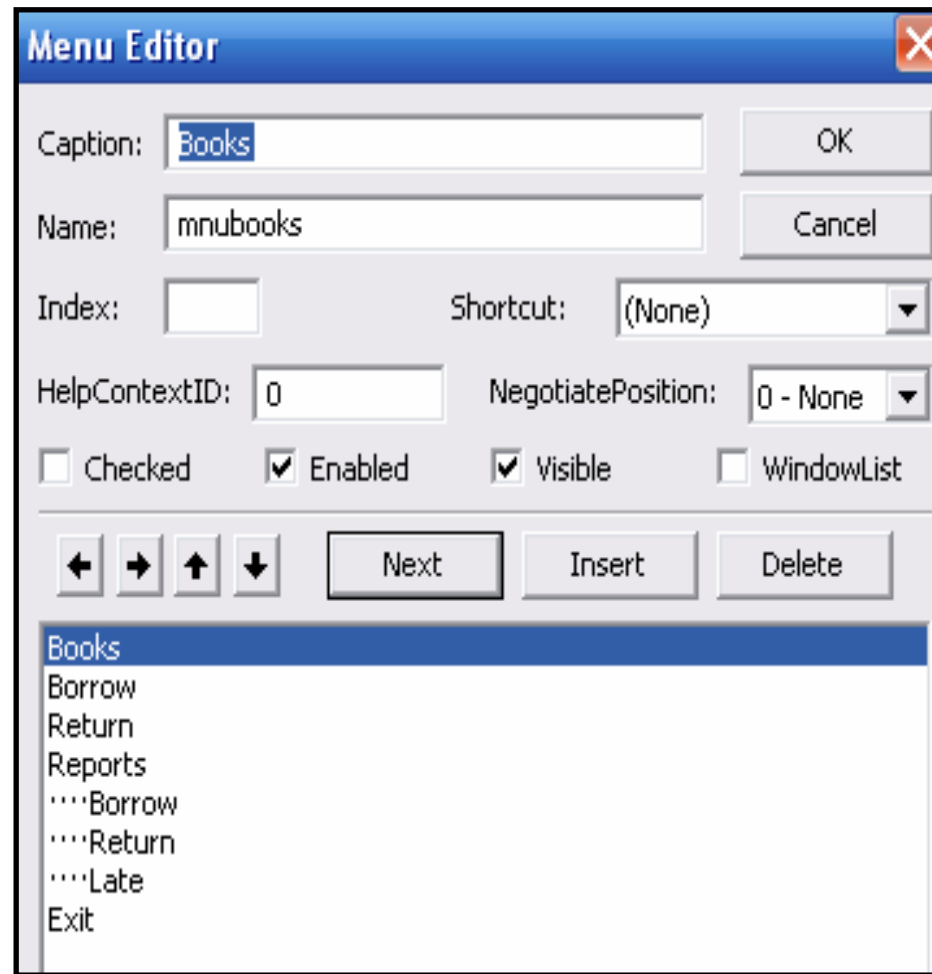

Creating an MDI Form

- To create an MDI Form
 - Click on Project
 - Click on Add MDI Form
 - Click OPEN

Tool Bar



Menu Bar



Status bar

- Double click on Status bar in the toolbox
- Right click on status bar
- Click on properties
- Select Panel
- Index 1
- Style 5 - sbrTime
- Click on Insert Panel
- Index 2
- Style 6 - sbrDate

Steps for designing Toolbar

- Right click on the Toolbox
- Click on Components
- Check Microsoft Windows Common Control 6.0 (SP4)
- Double Click on Toolbar
- Double Click on ImageList

Adding Pictures in ImageList

- Select ImageList 1 and right click
- Click on Properties
- Select Images
- Click on Insert Picture
- Select the picture
- Follow the same steps and insert 5 pictures

Adding Pictures in Toolbar

- Index 1
- Caption Books
- Image 1
- Click again on Insert Button

Adding Pictures in Toolbar

- Index 2
- Caption Borrow
- Image 2
- Click again on Insert Button

Adding Pictures in Toolbar

- Index 3
 - Caption Return
 - Image 3
-
- Click again on Insert Button

Adding Pictures in Toolbar

- Index 4
- Caption Report
- Image 4
- Style 5-tbr Dropdown
- Click on Insert Button Menu
- Index 1
- Text Borrow

Adding Pictures in Toolbar

- Click again on Insert Button Menu
 - Index 2
 - Text Return
-
- Click again on Insert Button Menu
 - Index 3
 - Text Late

Adding Pictures in Toolbar

- Index 5
- Caption Exit
- Image 5
- Click OK