**PROGRAM CODE**

**WELCOME FORM CODE:**

Public Class Form1

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

Form2.Show()

End Sub

End Class

**LOGIN FORM CODE:**

Imports System.Data.OleDb

Public Class Form2

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

Dim uname As String = ""

Dim pword As String = ""

Dim username As String = ""

Dim pass As String = ""

If (TextBox1.Text = "" Or TextBox2.Text = "") Then

MsgBox("Please fill all the info")

Else

uname = TextBox1.Text

pword = TextBox2.Text

Dim query As String = "select Password from LOGIN where Name='" & uname & "';"

Dim dbsource As String = "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=""|DataDirectory|\LIBRARY MANAGEMENT.accdb"""

Dim conn = New OleDbConnection(dbsource)

Dim cmd As New OleDbCommand(query, conn)

conn.Open()

Try

pass = cmd.ExecuteScalar().ToString

Catch ex As Exception

MsgBox("Username does not exist")

End Try

If (pword = pass) Then

MsgBox("Login success")

LIBRARY.Show()

If LIBRARY.Visible Then

Me.Hide()

End If

Else

MsgBox("Login Failed")

TextBox1.Clear()

TextBox2.Clear()

End If

End If

End Sub

End Class

**MDI FORM CODE:**

Imports System.Data.OleDb

Public Class LIBRARY

Private Sub MemberDetailsToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles MemberDetailsToolStripMenuItem.Click

Member\_details.Show()

End Sub

Private Sub BookDetailsToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles BookDetailsToolStripMenuItem.Click

Book\_Details.Show()

End Sub

Private Sub ExitToolStripMenuItem\_Click(sender As Object, e As EventArgs) Handles ExitToolStripMenuItem.Click

Me.Close()

End Sub

Private Sub OperationsToolStripMenuItem\_Click\_1(sender As Object, e As EventArgs) Handles OperationsToolStripMenuItem.Click

Operations.Show()

End Sub

End Class

**BOOK DETAILS FORM CODE:**

Imports System.Data.OleDb

Public Class Book\_Details

Dim cnn As New OleDb.OleDbConnection

Private Sub Book\_Details\_Load(sender As Object, e As EventArgs) Handles MyBase.Load

'TODO: This line of code loads data into the '\_LIBRARY\_MANAGEMENTDataSet.BOOK' table. You can move, or remove it, as needed.

Me.BOOKTableAdapter1.Fill(Me.LIBRARY\_MANAGEMENTDataSet.BOOK)

cnn = New OleDb.OleDbConnection

cnn.ConnectionString = "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=""|DataDirectory|\LIBRARY MANAGEMENT.accdb"""

End Sub

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

Dim cmd As New OleDb.OleDbCommand

If Not cnn.State = ConnectionState.Open Then

'open connection if it is not yet open

cnn.Open()

End If

cmd.Connection = cnn

cmd.CommandText = "INSERT INTO BOOK(BOOKID,BOOKNAME,AUTHOR,MEMBERID) " & \_

" VALUES('" & Me.txtBookId.Text & "','" & Me.txtBookName.Text & "','" & Me.txtAuthor.Text & "','" & Me.txtMemberId.Text & "')"

cmd.ExecuteNonQuery()

cnn.Close()

MsgBox("Record inserted!")

Me.RefreshData()

End Sub

Private Sub RefreshData()

If Not cnn.State = ConnectionState.Open Then

'open connection if it is not yet open

cnn.Open()

End If

Dim da As New OleDb.OleDbDataAdapter("Select \* from BOOK order by BOOKID", cnn)

Dim dt As New DataTable

da.Fill(dt)

Me.dgvData.DataSource = dt

cnn.Close()

End Sub

Private Sub Button5\_Click(sender As Object, e As EventArgs) Handles Button5.Click

Me.Close()

End Sub

Private Sub Button4\_Click(sender As Object, e As EventArgs) Handles Button4.Click

txtBookId.Text = ""

txtBookName.Text = ""

txtAuthor.Text = ""

txtMemberId.Text = ""

End Sub

Private Sub Button3\_Click(sender As Object, e As EventArgs) Handles Button3.Click

cnn = New OleDb.OleDbConnection

cnn.ConnectionString = "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=""|DataDirectory|\LIBRARY MANAGEMENT.accdb"""

If Not cnn.State = ConnectionState.Open Then

cnn.Open()

End If

MsgBox("Data will be Permently Deleted")

Dim str As String = txtBookId.Text

MsgBox("click ok to delete BOOK data " & txtBookId.Text, MsgBoxStyle.Critical, "notice")

Dim cmd As New OleDb.OleDbCommand

cmd.Connection = cnn

cmd.CommandText = "DELETE \* FROM BOOK WHERE BOOKID='" & str & " ' "

cmd.ExecuteNonQuery()

cnn.Close()

Me.RefreshData()

End Sub

End Class

**MEMBER DETAILS FORM CODE:**

Imports System.Data.OleDb

Public Class Member\_details

Dim cnn As New OleDb.OleDbConnection

Private Sub Member\_details\_Load(sender As Object, e As EventArgs) Handles MyBase.Load

'TODO: This line of code loads data into the 'LIBRARY\_MANAGEMENTDataSet.MEMBER' table. You can move, or remove it, as needed.

Me.MEMBERTableAdapter.Fill(Me.LIBRARY\_MANAGEMENTDataSet.MEMBER)

cnn = New OleDb.OleDbConnection

cnn.ConnectionString = "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=""|DataDirectory|\LIBRARY MANAGEMENT.accdb"""

End Sub

Private Sub Button1\_Click(sender As Object, e As EventArgs) Handles Button1.Click

Dim cmd As New OleDb.OleDbCommand

If Not cnn.State = ConnectionState.Open Then

'open connection if it is not yet open

cnn.Open()

End If

cmd.Connection = cnn

cmd.CommandText = "INSERT INTO MEMBER(MEMBERID,MEMBERNAME) " & \_

" VALUES('" & Me.TextBox1.Text & "','" & Me.TextBox2.Text & "')"

cmd.ExecuteNonQuery()

cnn.Close()

MsgBox("Record inserted!")

Me.RefreshData()

End Sub

Private Sub RefreshData()

If Not cnn.State = ConnectionState.Open Then

'open connection if it is not yet open

cnn.Open()

End If

Dim da As New OleDb.OleDbDataAdapter("Select \* from BOOK order by BOOKID", cnn)

Dim dt As New DataTable

da.Fill(dt)

Me.dgvData.DataSource = dt

cnn.Close()

End Sub

Private Sub Button2\_Click(sender As Object, e As EventArgs) Handles Button2.Click

cnn = New OleDb.OleDbConnection

cnn.ConnectionString = "Provider=Microsoft.ACE.OLEDB.12.0;Data Source=""|DataDirectory|\LIBRARY MANAGEMENT.accdb"""

If Not cnn.State = ConnectionState.Open Then

cnn.Open()

End If

MsgBox("Data will be Permently Deleted")

Dim str As String = TextBox1.Text

MsgBox("click ok to delete MEMBER data " & TextBox1.Text, MsgBoxStyle.Critical, "notice")

Dim cmd As New OleDb.OleDbCommand

cmd.Connection = cnn

cmd.CommandText = "DELETE \* FROM MEMBER WHERE MEMBERID='" & str & " ' "

cmd.ExecuteNonQuery()

cnn.Close()

Me.RefreshData()

End Sub

Private Sub Button4\_Click(sender As Object, e As EventArgs) Handles Button4.Click

TextBox1.Text = ""

TextBox2.Text = ""

End Sub

Private Sub Button5\_Click(sender As Object, e As EventArgs) Handles Button5.Click

Me.Close()

End Sub

End Class

**OPERATIONS FORM CODE:**

Public Class Operations

Dim BookLoan As Short

Private Sub OperationsBindingNavigatorSaveItem\_Click(sender As Object, e As EventArgs) Handles OperationsBindingNavigatorSaveItem.Click

Me.Validate()

Me.OperationsBindingSource.EndEdit()

Me.TableAdapterManager.UpdateAll(Me.LIBRARY\_MANAGEMENTDataSet)

End Sub

Private Sub Operations\_Load(sender As Object, e As EventArgs) Handles MyBase.Load

'TODO: This line of code loads data into the 'LIBRARY\_MANAGEMENTDataSet.MEMBER' table. You can move, or remove it, as needed.

Me.MEMBERTableAdapter.Fill(Me.LIBRARY\_MANAGEMENTDataSet.MEMBER)

'TODO: This line of code loads data into the 'LIBRARY\_MANAGEMENTDataSet.BOOK' table. You can move, or remove it, as needed.

Me.BOOKTableAdapter.Fill(Me.LIBRARY\_MANAGEMENTDataSet.BOOK)

'TODO: This line of code loads data into the 'LIBRARY\_MANAGEMENTDataSet.Operations' table. You can move, or remove it, as needed.

Me.OperationsTableAdapter.Fill(Me.LIBRARY\_MANAGEMENTDataSet.Operations)

End Sub

Private Sub btBorrowed\_Click(sender As Object, e As EventArgs) Handles btBorrowed.Click

Dim BookDueDate As Date

Select Case NumericUpDown1.Value

Case 0

BookLoan = 1

Case 1

BookLoan = 3

Case 2

BookLoan = 5

Case 3

BookLoan = 10

Case 4

BookLoan = 15

Case 5

BookLoan = 20

Case 6

BookLoan = 25

Case 7

BookLoan = 30

End Select

BookDueDate = Today.AddDays(BookLoan)

txtDateDue.Text = Format(BookDueDate, "dddd dd MMM yyyy")

End Sub

Private Sub btnReturned\_Click(sender As Object, e As EventArgs)

Dim DateDueBack As Date

Dim DaysOverdue As Short

Dim FineRate As Decimal

Dim Fine As Decimal

DateDueBack = txtDateDue.Text

DaysOverdue = DateDiff("d", DateDueBack, txtDateReturned.Text)

Select Case NumericUpDown1.Value

Case 0

BookLoan = 1

FineRate = 0.5

Case 1

BookLoan = 3

FineRate = 0.25

Case 2

BookLoan = 10

FineRate = 0.1

Case 3

BookLoan = 30

FineRate = 0.05

Case 4

BookLoan = 40

FineRate = 0.95

Case 5

BookLoan = 10

FineRate = 0.7

Case 6

BookLoan = 50

FineRate = 0.37

Case 7

BookLoan = 60

FineRate = 0.15

End Select

If DaysOverdue <= 0 Then

DaysOverdue = 0

End If

If DaysOverdue > 0 Then

Fine = FineRate \* DaysOverdue

Else

Fine = 0

End If

txtDaysOverDue.Text = DaysOverdue & " days overdue"

txtFine.Text = "Fine of" & Format(Fine, "Currency") & "to pay"

End Sub

Private Sub btnReturned\_Click\_1(sender As Object, e As EventArgs) Handles btnReturned.Click

Dim DateDueBack As Date

Dim DaysOverdue As Short

Dim FineRate As Decimal

Dim Fine As Decimal

DateDueBack = txtDateDue.Text

DaysOverdue = DateDiff("d", DateDueBack, txtDateReturned.Text)

Select Case NumericUpDown1.Value

Case 0

BookLoan = 1

FineRate = 0.5

Case 1

BookLoan = 3

FineRate = 0.25

Case 2

BookLoan = 10

FineRate = 0.1

Case 3

BookLoan = 30

FineRate = 0.05

Case 4

BookLoan = 40

FineRate = 0.95

Case 5

BookLoan = 10

FineRate = 0.7

Case 6

BookLoan = 50

FineRate = 0.37

Case 7

BookLoan = 60

FineRate = 0.15

End Select

If DaysOverdue <= 0 Then

DaysOverdue = 0

End If

If DaysOverdue > 0 Then

Fine = FineRate \* DaysOverdue

Else

Fine = 0

End If

txtDaysOverDue.Text = DaysOverdue & " days overdue"

txtFine.Text = "Fine of" & Format(Fine, "Currency") & "to pay"

End Sub

End Class