SPCA105N

POSTGRADUATE COURSE

Master of Computer Applications

FIRST YEAR - FIRST SEMESTER

PAPER - V

PRACTICAL - II

RDBMS LAB

INSTITUTE OF DISTANCE EDUCATION

UNIVERSITY OF MADRAS

WELCOME

Warm Greetings.

It is with a great pleasure to welcome you as a student of Institute of Distance Education, University of Madras. It is a proud moment for the Institute of Distance education as you are entering into a cafeteria system of learning process as envisaged by the University Grants Commission. Yes, we have framed and introduced as per AICTE Choice Based Credit System(CBCS) in Semester pattern from the academic year 2020-21. You are free to choose courses, as per the Regulations, to attain the target of total number of credits set for each course and also each degree programme. What is a credit? To earn one credit in a semester you have to spend 30 hours of learning process. Each course has a weightage in terms of credits. Credits are assigned by taking into account of its level of subject content. For instance, if one particular course or paper has 4 credits then you have to spend 120 hours of self-learning in a semester. You are advised to plan the strategy to devote hours of self-study in the learning process. You will be assessed periodically by means of tests, assignments and quizzes either in class room or laboratory or field work. In the case of PG (UG), Continuous Internal Assessment for 20(25) percentage and End Semester University Examination for 80 (75) percentage of the maximum score for a course / paper. The theory paper in the end semester examination will bring out your various skills: namely basic knowledge about subject, memory recall, application, analysis, comprehension and descriptive writing. We will always have in mind while training you in conducting experiments, analyzing the performance during laboratory work, and observing the outcomes to bring out the truth from the experiment, and we measure these skills in the end semester examination. You will be guided by well experienced faculty.

I invite you to join the CBCS in Semester System to gain rich knowledge leisurely at your will and wish. Choose the right courses at right times so as to erect your flag of success. We always encourage and enlighten to excel and empower. We are the cross bearers to make you a torch bearer to have a bright future.

With best wishes from mind and heart,

DIRECTOR

COORDINATION & EDITING

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Assistant Professor in Computer Science
Institute of Distance Education
University of Madras
Chepauk Chennnai - 600 005.

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M.C.A.

FIRST YEAR - FIRST SEMESTER

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RDBMS LAB

SYLLABUS

Objective of the course: This course gives training in design and implementation of data bases for the selected problems. Students are advised to use the concepts like Data Normalization, Link between table by means of foreign keys and other relevant data base concepts for developing databases for the following problems. The implementation of each problem should have necessary input screen Menu-driven query processing and pleasing reports. The choice or RDBMS is left to the students. Necessary validations must be done after developing database.

Course Outcomes: After successful completion of this course, the students should be able to understand and design an application for library management system, student marksheet, bank transaction, quiz using controls and fields.

1. Building Simple Applications.
2. Working with Intrinsic Controls and ActiveX Controls.
3. Application with multiple forms.
4. Application with Dialogs.
5. Application with Menus.
6. Application using Data Controls.
7. Application using Common Dialogs.
8. Drag and Drop Events.
9. Database Management.
10. Creating ActiveX Controls.
11. Library Management System.
12. Students Marksheet Processing.
13. Bank Transactions.
14. Personal information system.
15. Question Database and conducting Quiz.

M.C.A.

FIRST YEAR - FIRST SEMESTER

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RDBMS LAB

SCHEME OF LESSONS

Sl. No.	Title	Page
1.	Students Mark Sheet Processing	26
2.	Electricity Bill Processing	38
3.	Gas Booking and Delivery System	48
4.	Bank Transactions (SB)	57
5.	Inventory System	70
6.	Purchase Order Processing	74
7.	Pay Roll Processing	82
8.	Question Database and Conducting Quiz	96
9.	Library Information Processing	110
10.	Telephone Directory Maintenance	130

INSTITUTE OF DISTANCE EDUCATION
UNIVERSITY OF MADRAS

CHENNAI - 600 005

RECORD OF PRACTICALS

M.C.A. (First Year)

20____ - 20____

Practical - II

RDBMS LAB

NAME :

ENROLMENT NUMBER :

GROUP NO. :

INSTITUTE OF DISTANCE EDUCATION
UNIVERSITY OF MADRAS

CHENNAI - 600 005.

Certified that this is the Bonafide Record of work done by _____ with Enrolment Number _____ of First Year M.C.A. Degree Course in the Institute of Distance Education, University of Madras during the year _____ in respect of **RDBMS LAB**

Date: **Co-ordinator**

Submitted for First Year M.C.A. Degree Course Practical Examination held on _____ at _____

Date: **Examiners**

1. **Name:**

Signature:

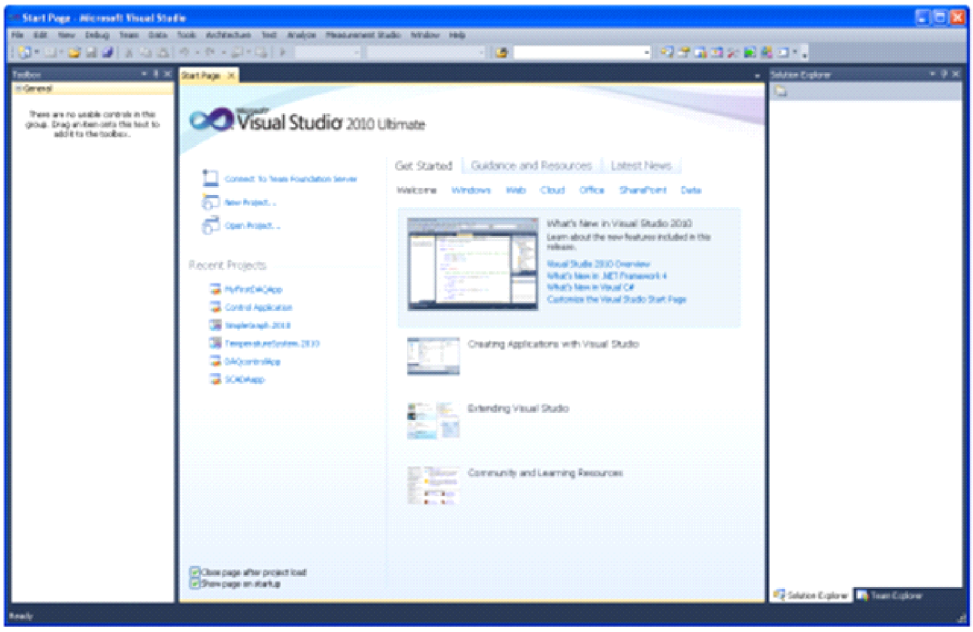
2. **Name:**

Signature:

INTRODUCTION

Getting started to visual studio 2010

The Visual Studio product family shares a single integrated development environment (IDE) that is composed of several elements: the Menu barStandard toolbar, various tool windows docked or auto-hidden on the left, bottom, and right sides, as well as the editor space. The tool windows, menus, and toolbars available depend on the type of project or file you are working in. Below we see the Visual Studio IDE (Integrated Development Environment):



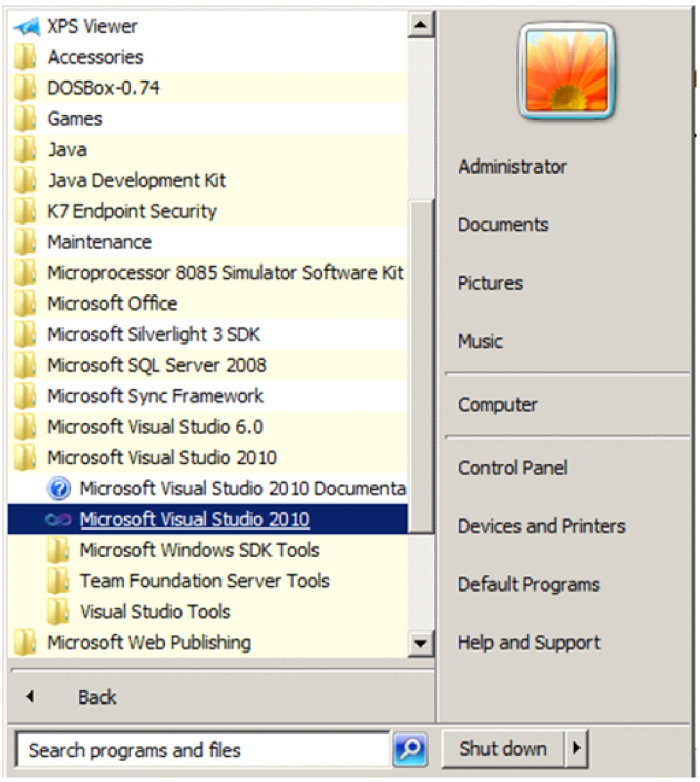
Logon to visual studio 2010 in windows 2007 OS

Step1→ Start → All programs → select the **Microsoft Visual Studio 2010**

Or

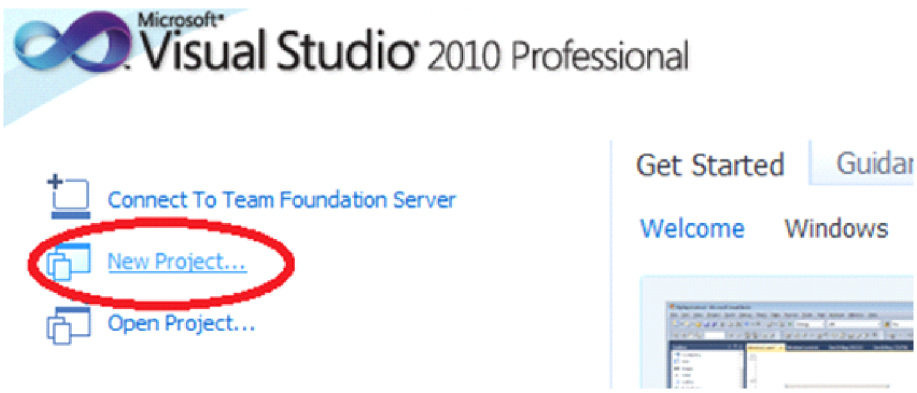
Logon to visual studio 2010 in windows 2010 OS

Start → "ask me anything" option and type "Microsoft Visual Studio 2010"



New Project

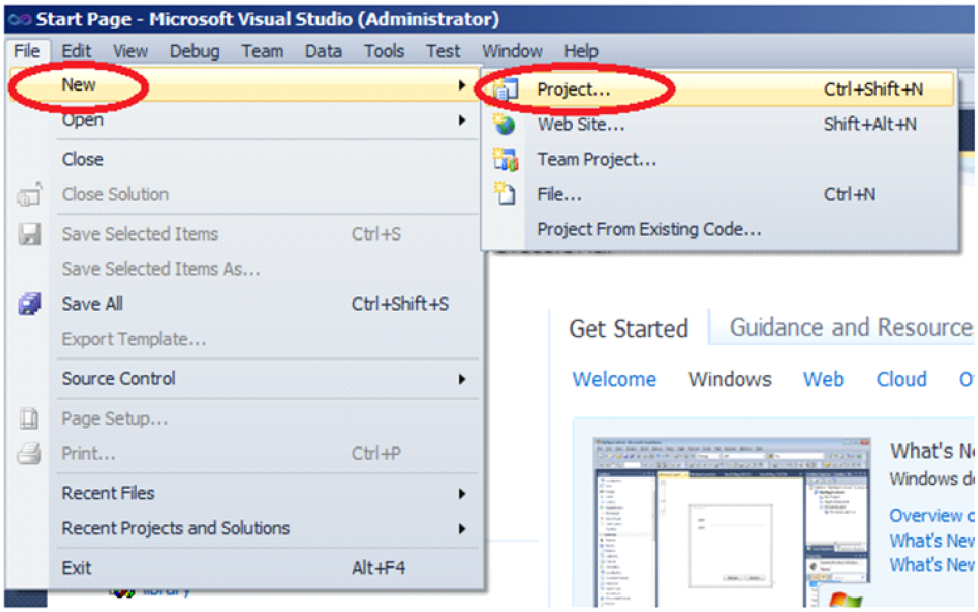
The first thing you do when you want to create a new application is to create a new project. This can be done from the Start Page:



Or from the **file Menu**

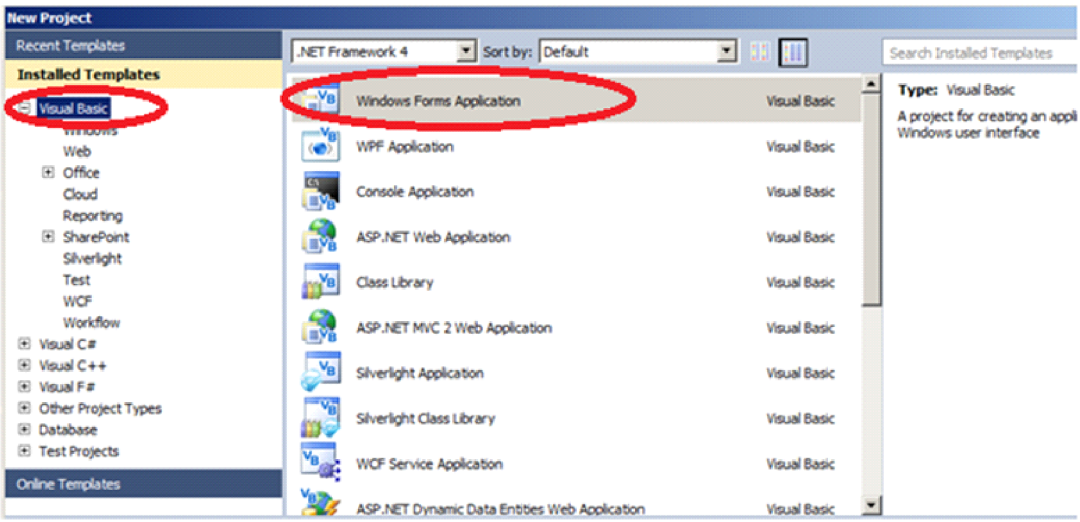
New → project

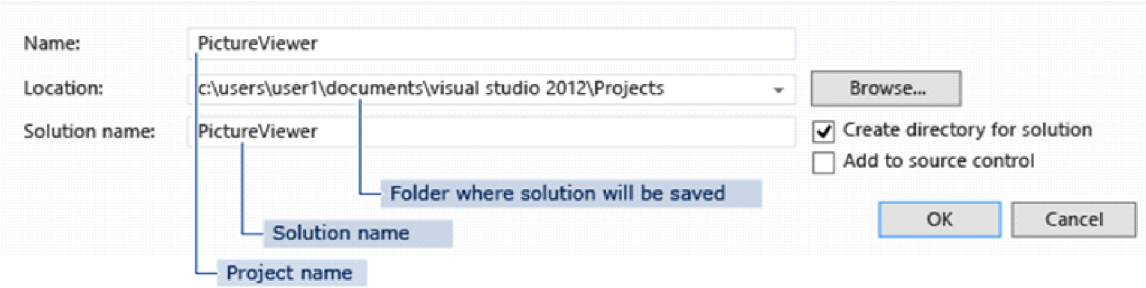
If you want shortcut option in keyboard → CTRL+SHIFT+N and appeared one dialog box



Step 2:

The New Project dialog box opens, as shown on the following page





The New Project dialog box provides access to the major project types available for writing Windows and Web applications.

Click the Windows Forms Application icon in the central Templates area of the dialog box.

Visual Studio prepares the development environment for Visual Basic Windows application programming.

Visual basic → and choose → Windows forms Application

In the Name text box, type **first program**

Click OK to create the new project in Visual Studio.

Press “ ”

Run the program

Server Explorer

Toolbox

Solution Explorer

Properties windows

In the windows form design page and appeared in Left and side for Tool box option

Design page

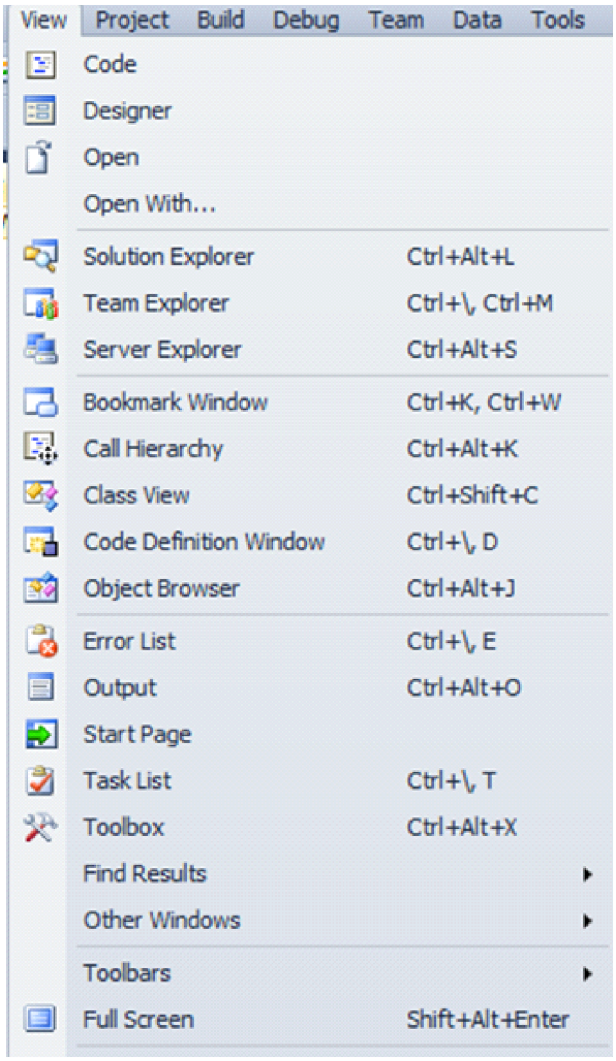
If you want coding window, use the mouse on “Double click” and show on coding windows or “Right click→choose “ view code”

```
Public Class Form1

    Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

    End Sub
End Class
```

The Important of short keys are followed using in the keyboard.

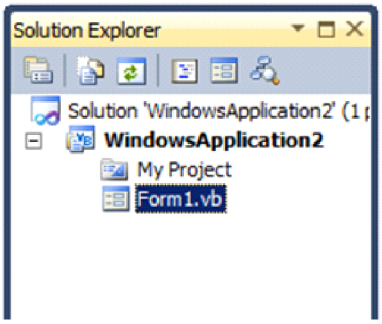
Tool box	→	CTRL+ALT+X
Solution Explorer	→	CTRL+ALT+L
Properties windows	→	F4 (Function key)
Run the program	→	F5

If you want mouse options, you go to the menu bar and select theà view option.



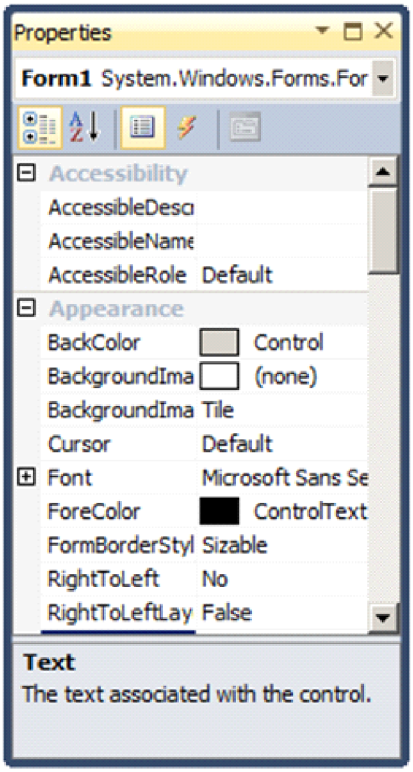
Solution Explorer

Solutions and projects contain items that represent the references, data connections, folders, and files that you need to create your application. A solution container can contain multiple projects and a project container typically contains multiple items.



Properties window

Each control we have on our user interface has lots of Properties we can set. This is done in the Properties window:

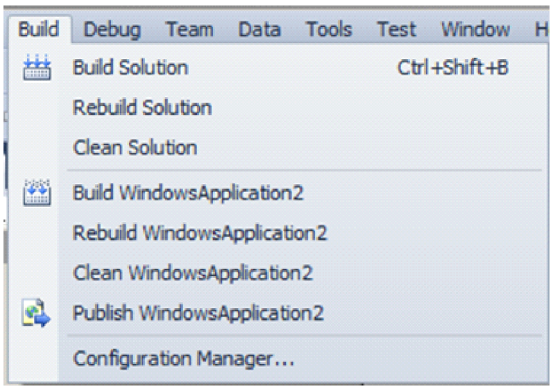


Build and Debug Tools

In Visual Studio we have lots of Build and Debugging Tools.

Buildmenu:

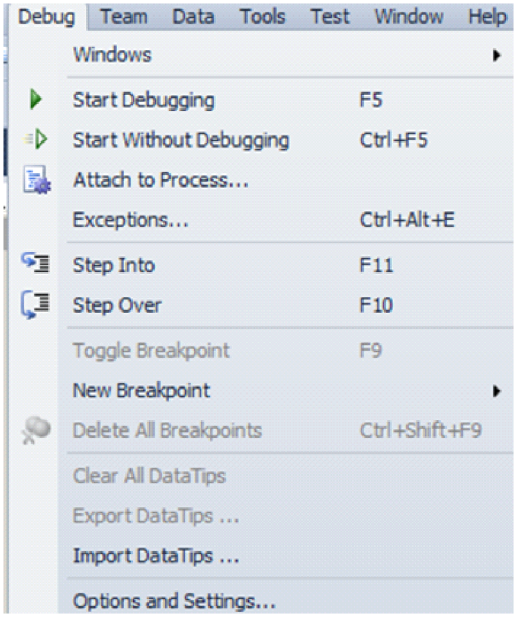
Below we see the **Build** menu:



The most used tool is "**BuildSolution**" (Shortcut Key: F6).

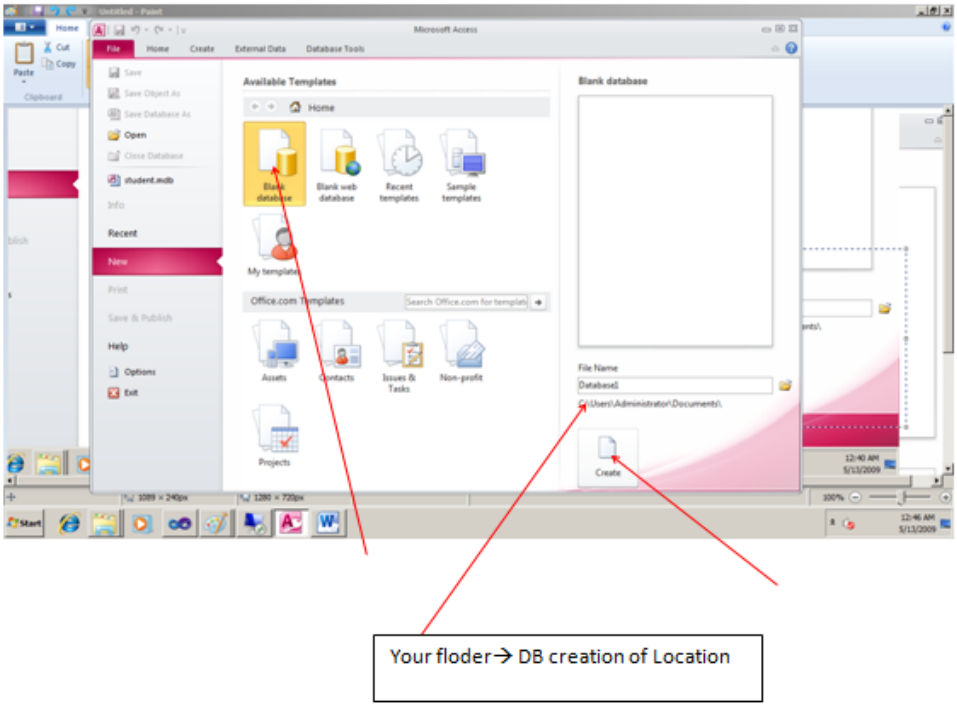
Debug menu:

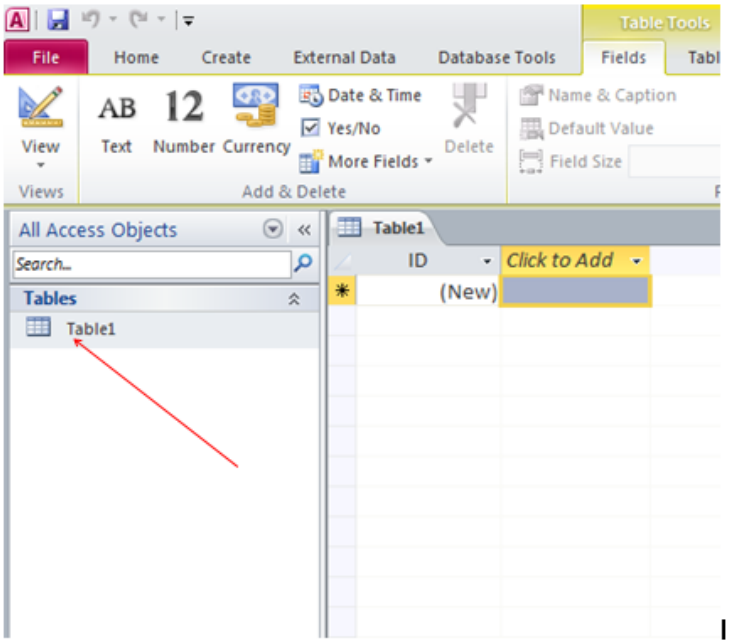
Below we see the **Debug** menu:

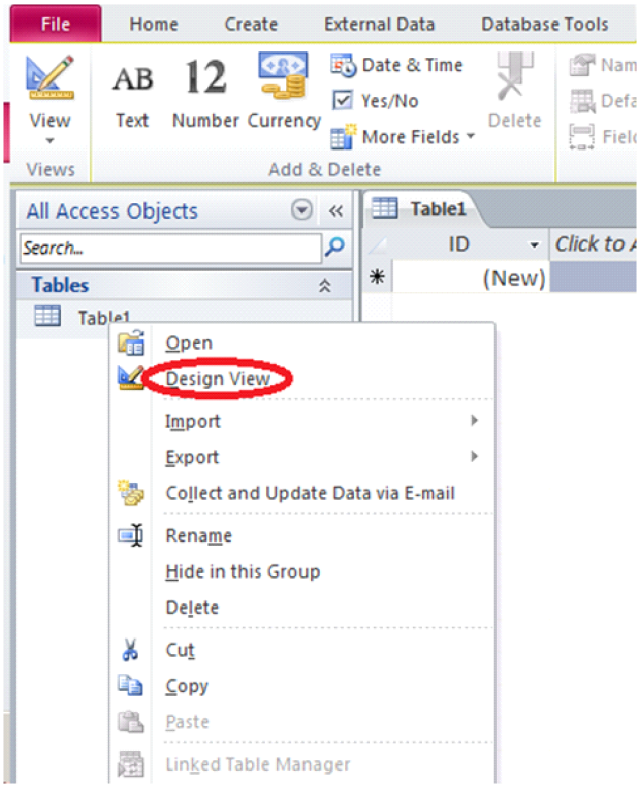


The most used tool is "**Start Debugging**" (Shortcut Key: F5).

Back end Creation in Microsoft Access 2010






File
Home
Create
External Data
Database Tools
View
Views
Text
Number
Currency
Date & Time
Yes/No
More Fields
Delete
Add & Delete
All Access Objects
Search...
Tables
Table1
Table1
ID
Click to A
(New)
Open
Design View
Import
Export
Collect and Update Data via E-mail
Rename
Hide in this Group
Delete
Cut
Copy
Paste
Linked Table Manager

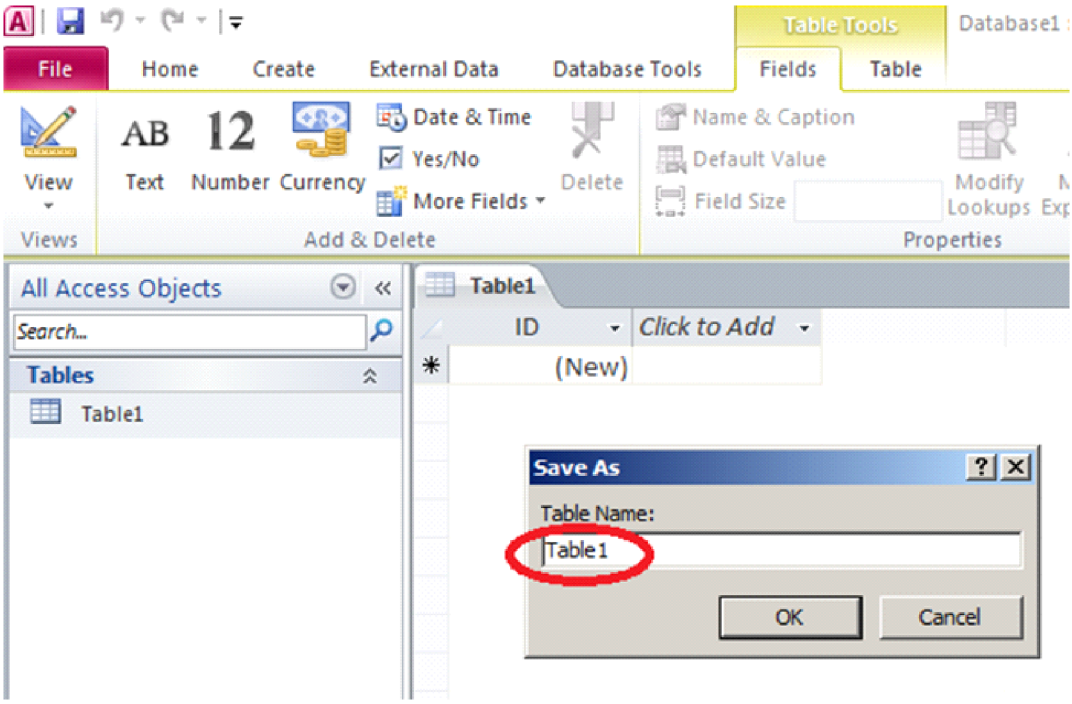
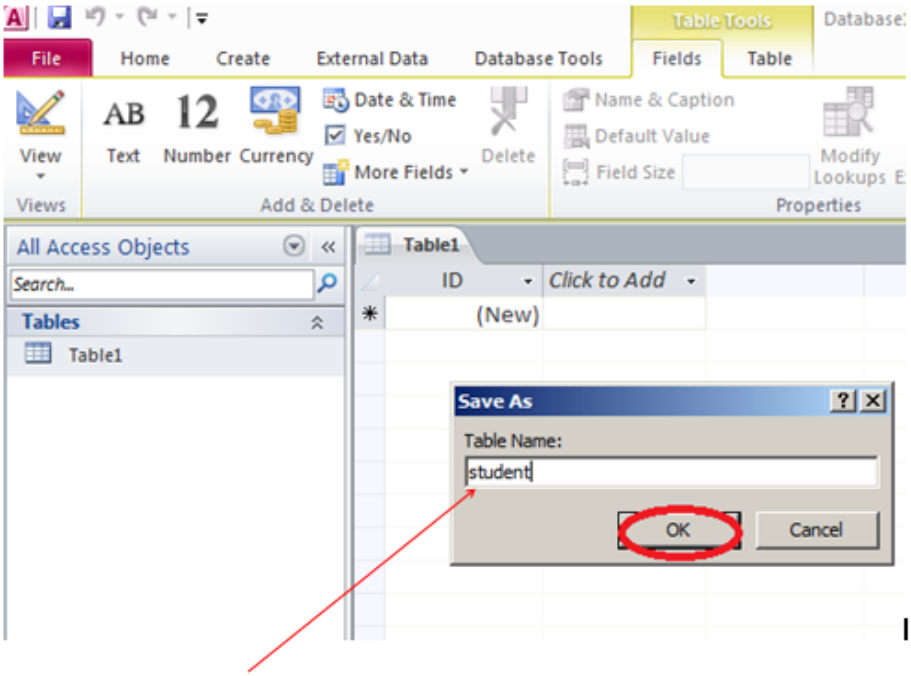
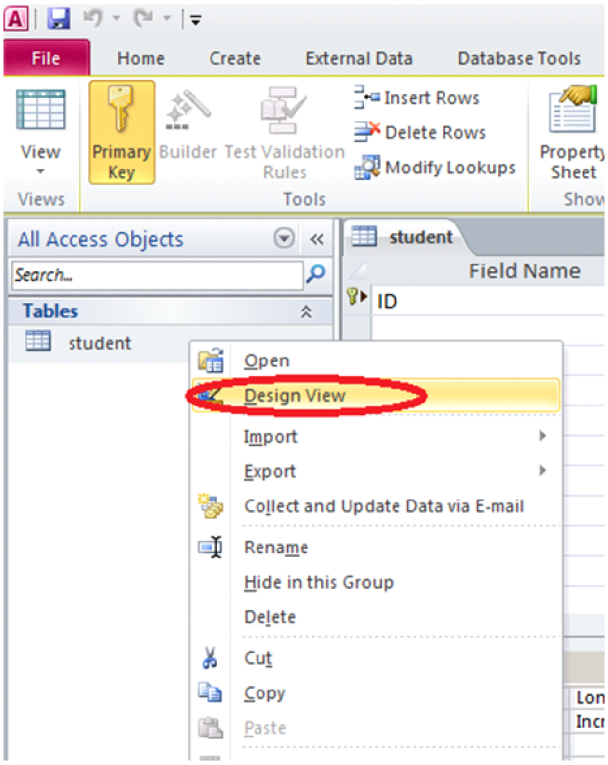
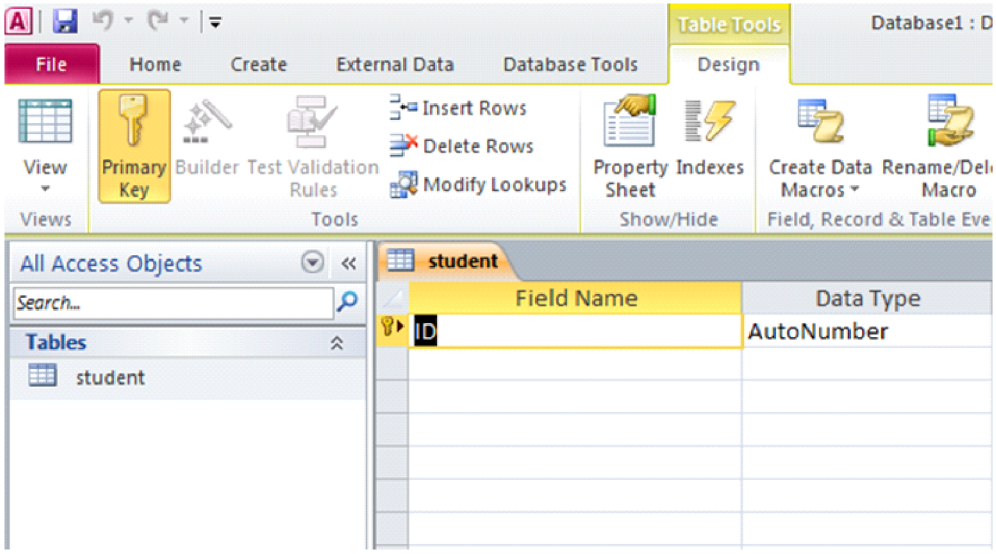
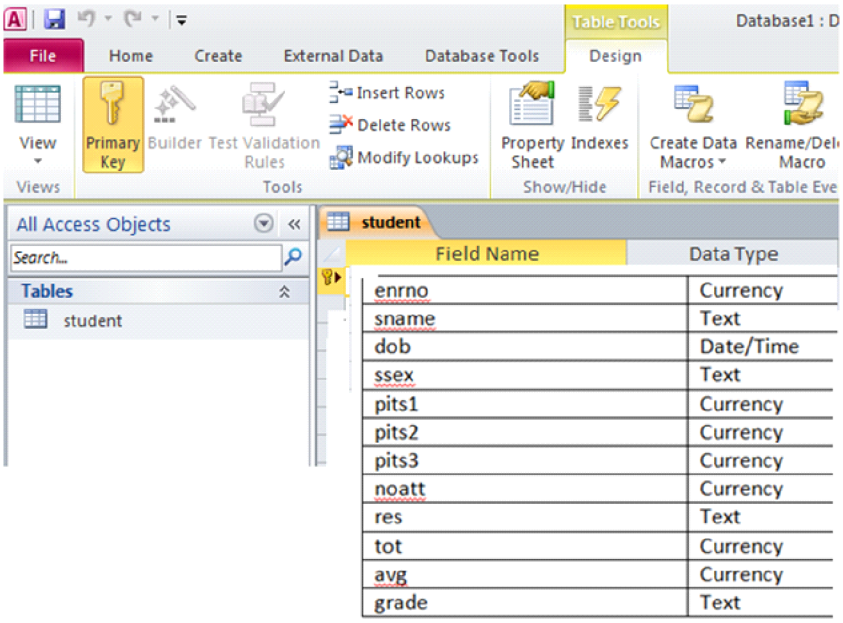


Table Tools
Database1
File
Home
Create
External Data
Database Tools
Fields
Table
View
Views
Text
Number
Currency
Date & Time
Yes/No
More Fields
Delete
Add & Delete
Name & Caption
Default Value
Field Size
Modify Lookups
Properties
All Access Objects
Search...
Tables
Table1
Table1
ID
Click to Add
(New)
Save As
Table Name:
Table1
OK
Cancel


File
Home
Create
External Data
Database Tools
Table Tools
Fields
Table
View
Text
Number
Currency
Date & Time
Yes/No
More Fields
Delete
Name & Caption
Default Value
Field Size
Modify Lookups
Views
Add & Delete
Properties
All Access Objects
Search...
Tables
Table1
ID
Click to Add
(New)
Save As
Table Name:
student
OK
Cancel


File
Home
Create
External Data
Database Tools
View
Primary Key
Builder
Test Validation Rules
Insert Rows
Delete Rows
Modify Lookups
Property Sheet
Views
Tools
All Access Objects
Search...
Tables
student
student
Field Name
ID
Open
Design View
Import
Export
Collect and Update Data via E-mail
Rename
Hide in this Group
Delete
Cut
Copy
Paste



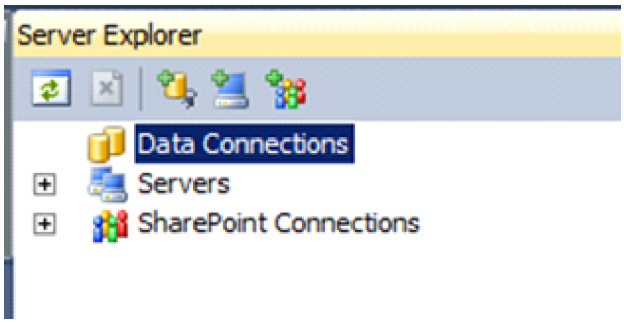


Front end and back end connection procedure

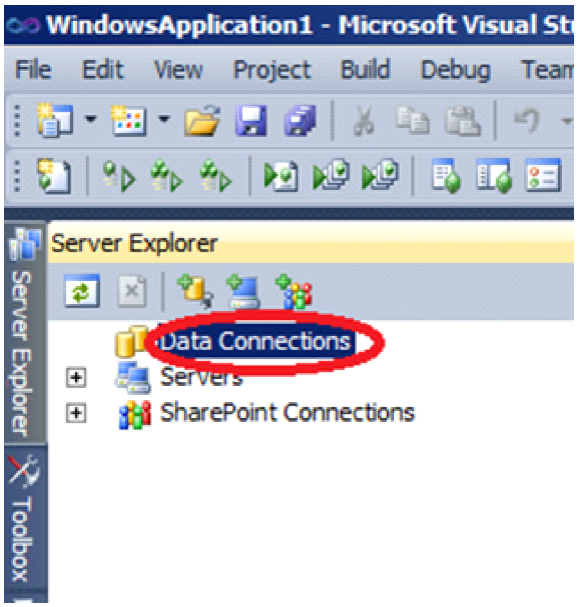
The following steps to be followed for connecting the backend to front end forms.

Select the server explorer option from the view menu of the standard tool bar. From where choose data connection.

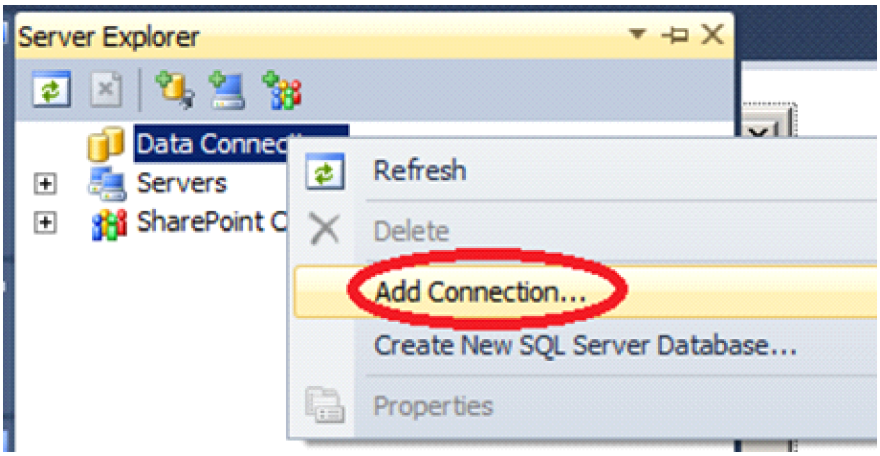
Step1: →go to Server explorer



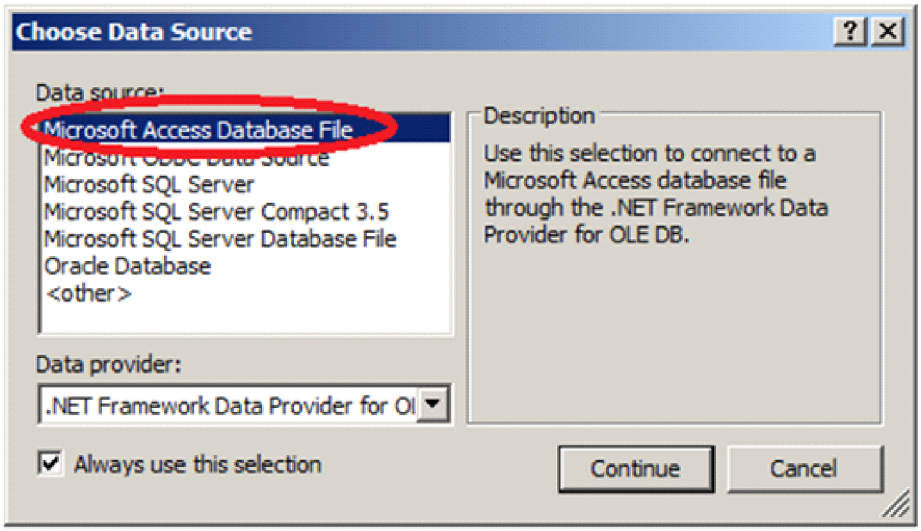
Choose → Data connections



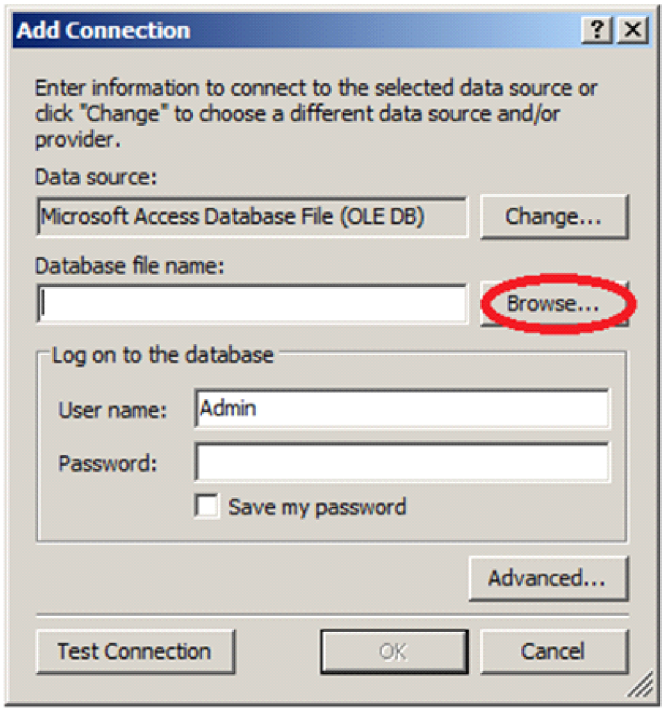
Right click and choose → Add Connection

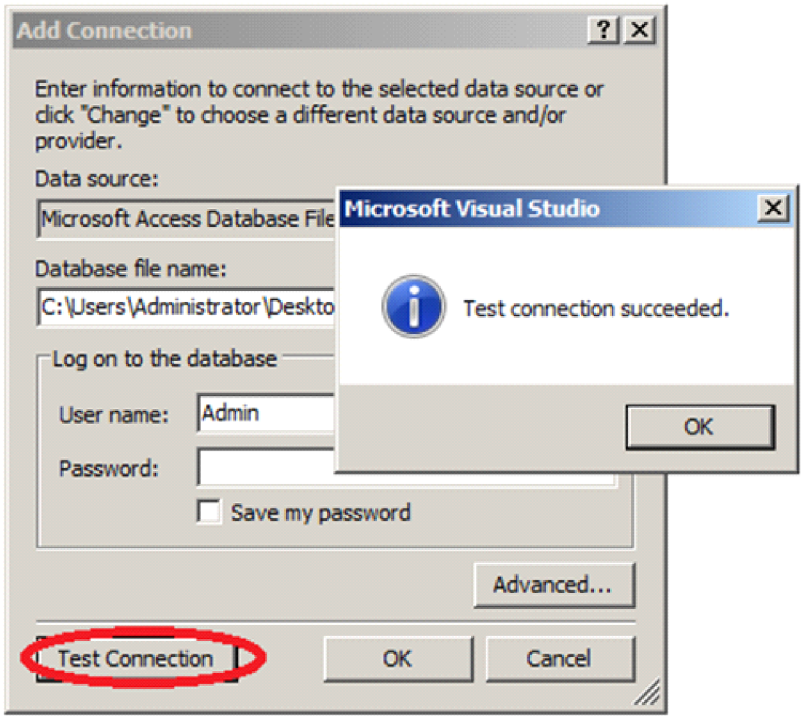


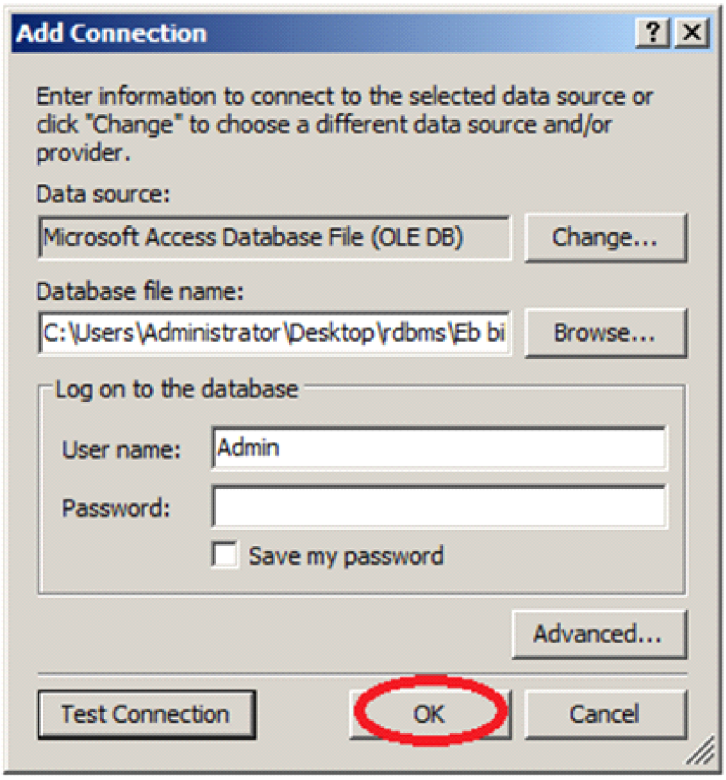
Next appear dialog box as follows àthen choose Data Source and select the→**Microsoft Access Database File**

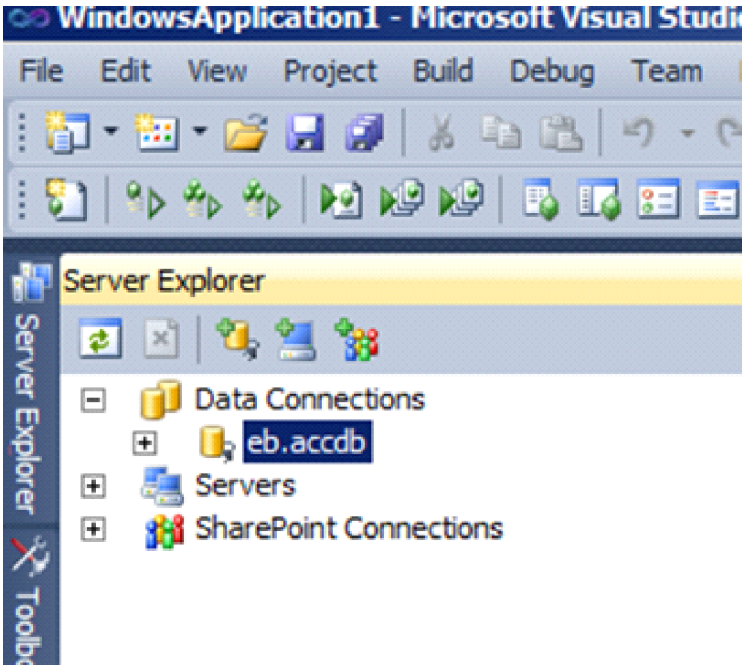


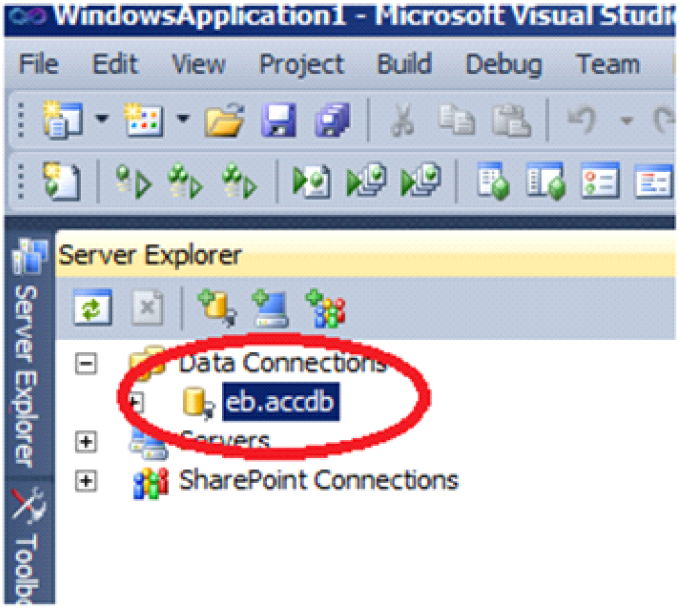
Then “Continue” and choose “Browse” and select the DataBase


Add Connection
Enter information to connect to the selected data source or click "Change" to choose a different data source and/or provider.
Data source:
Microsoft Access Database File (OLE DB)
Change...
Database file name:
Browse...
Log on to the database
User name:
Admin
Password:
Save my password
Advanced...
Test Connection
OK
Cancel


Add Connection
Enter information to connect to the selected data source or click "Change" to choose a different data source and/or provider.
Data source:
Microsoft Access Database File
Database file name:
C:\Users\Administrator\Deskto
Log on to the database
User name:
Admin
Password:
Save my password
Advanced...
Test Connection
OK
Cancel
Microsoft Visual Studio
Test connection succeeded.
OK

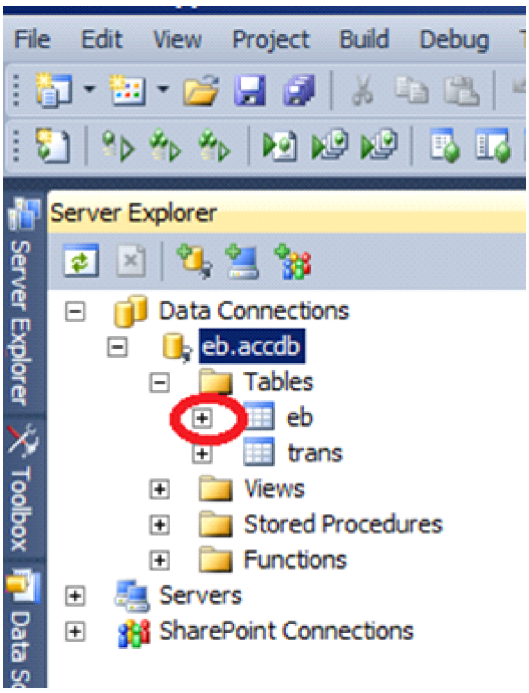

Add Connection
Enter information to connect to the selected data source or click "Change" to choose a different data source and/or provider.
Data source:
Microsoft Access Database File (OLE DB)
Change...
Database file name:
C:\Users\Administrator\Desktop\rdbms\Eb bi
Browse...
Log on to the database
User name:
Admin
Password:
Save my password
Advanced...
Test Connection
OK
Cancel

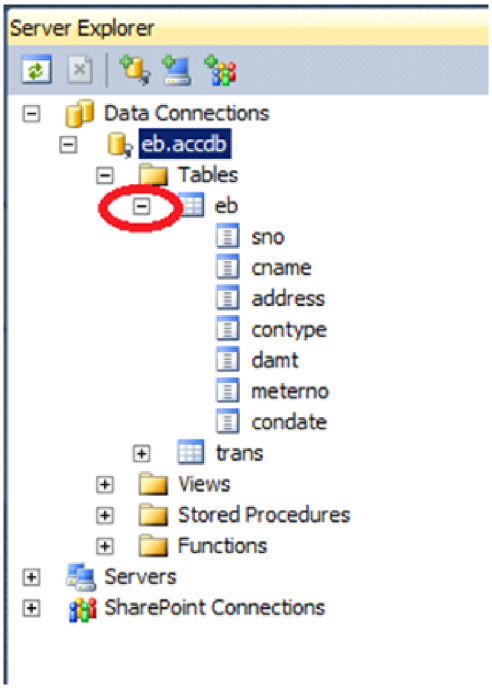

WindowsApplication1 - Microsoft Visual Studi
File
Edit
View
Project
Build
Debug
Team
Server Explorer
Data Connections
eb.accdb
Servers
SharePoint Connections
Server Explorer
Toolbo



Right Click → and go to properties windows→ and choose connection Strings→copy the path

Provider=Microsoft.ACE.OLEDB.12.0;Data Source=C:\Users\Administrator\rdbms\Ebbill\eb.accdb

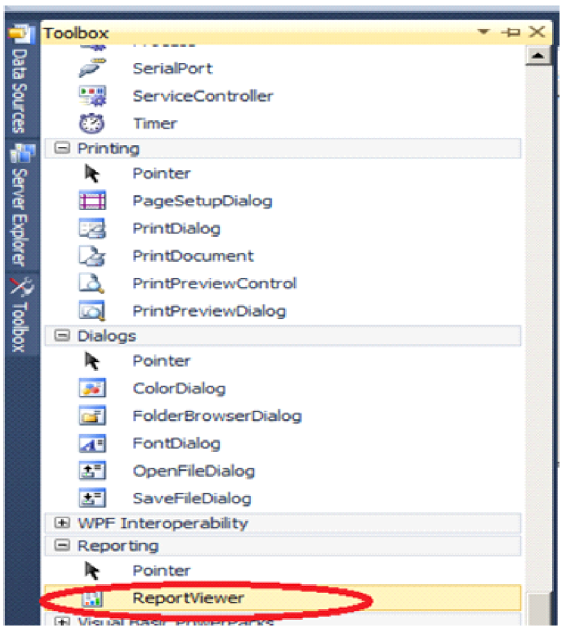




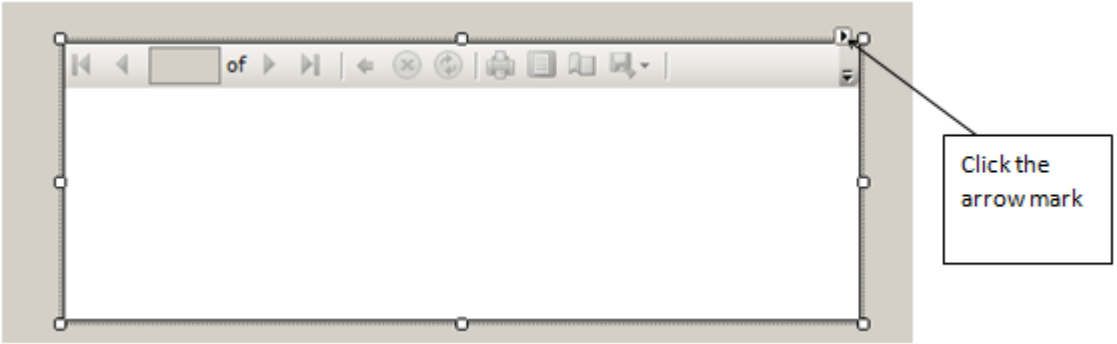
Creating a Report

Step 1:

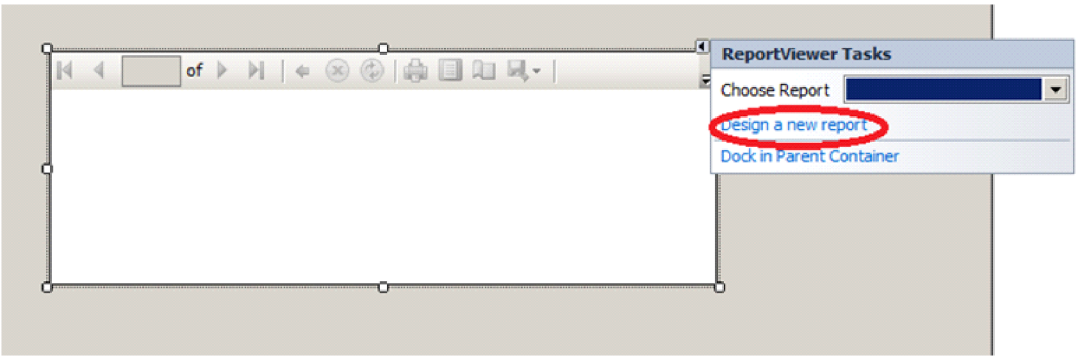
Goto toolbox and choose →reporting→ reportviewer

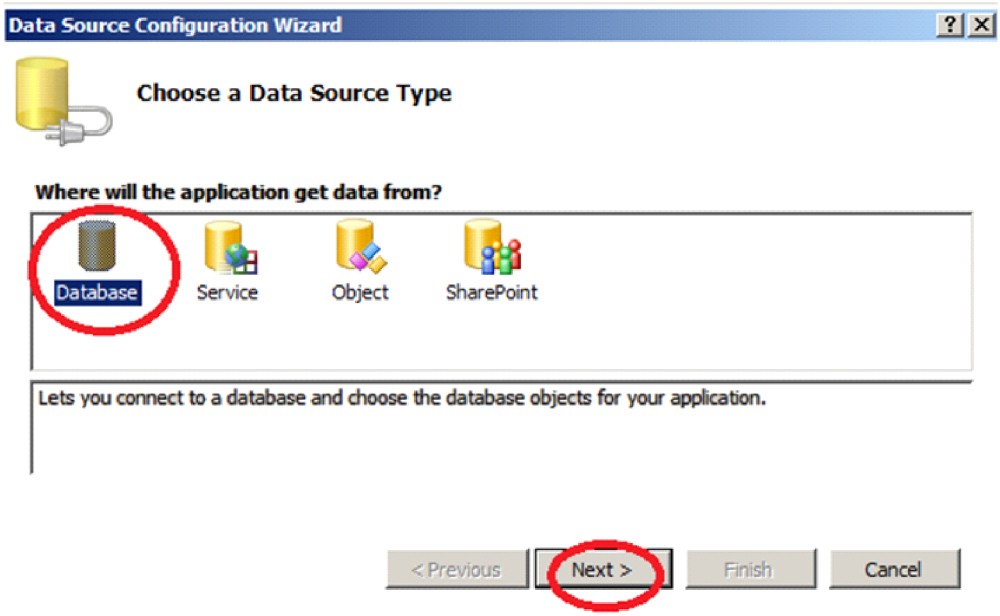


Create a New WindowsForm →Drag ReportViewer

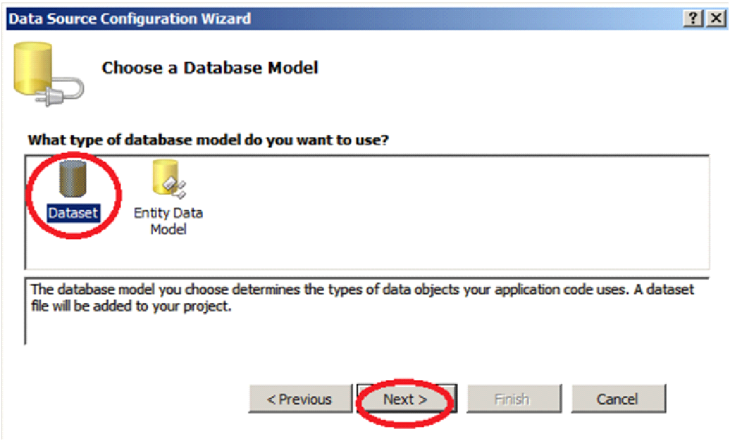


Next

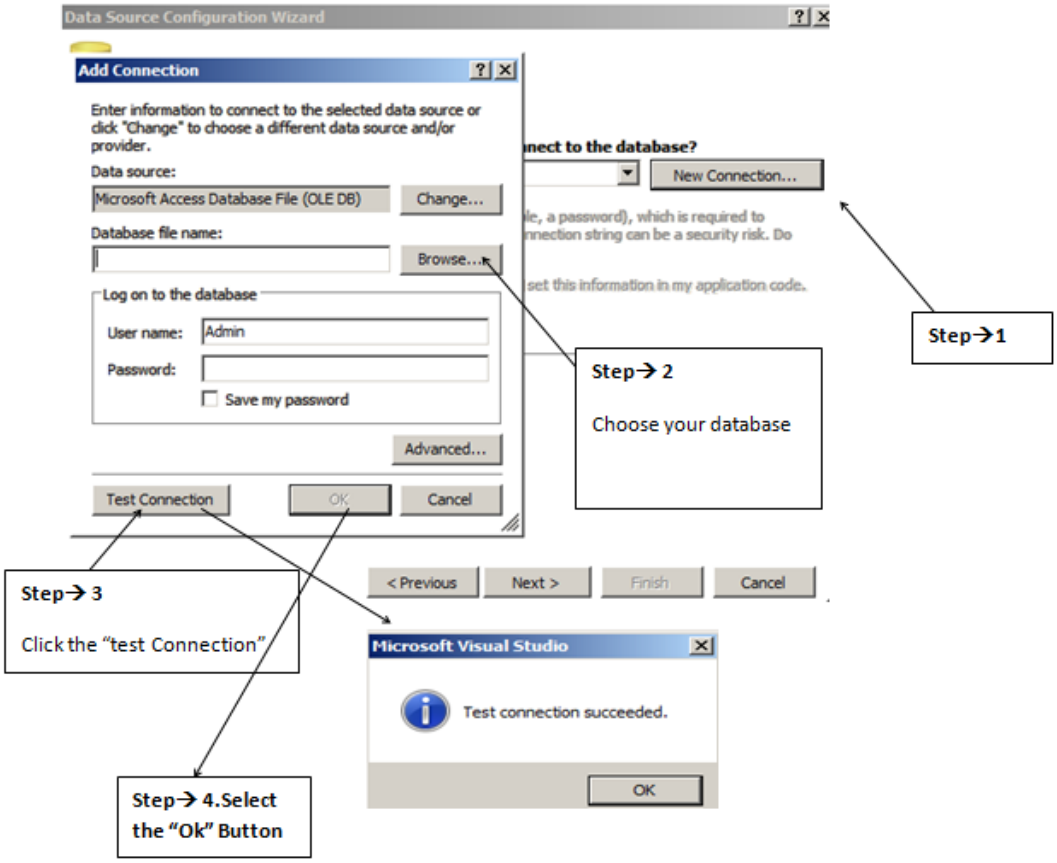




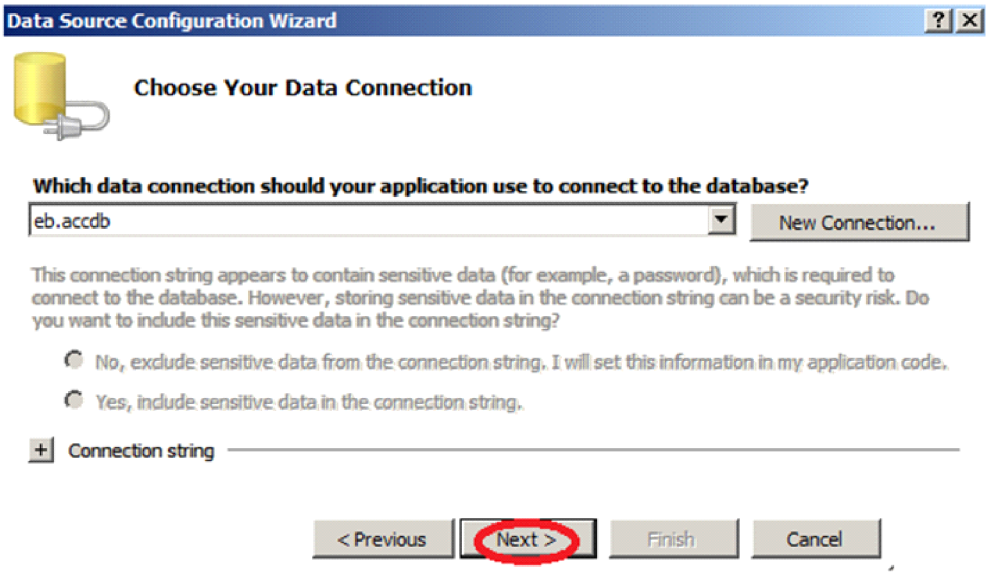
Next



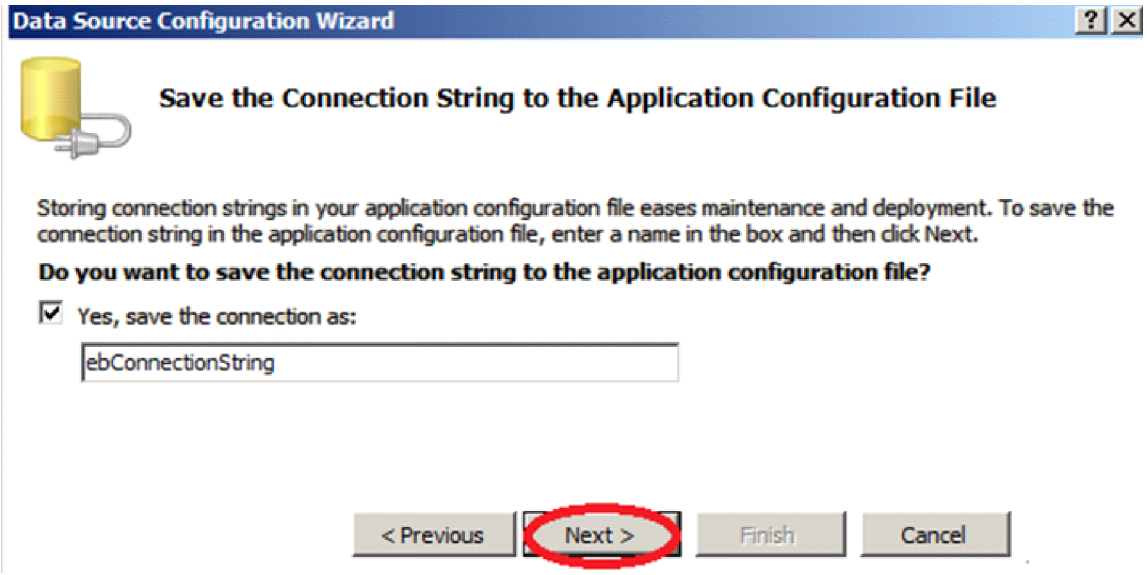
Next step



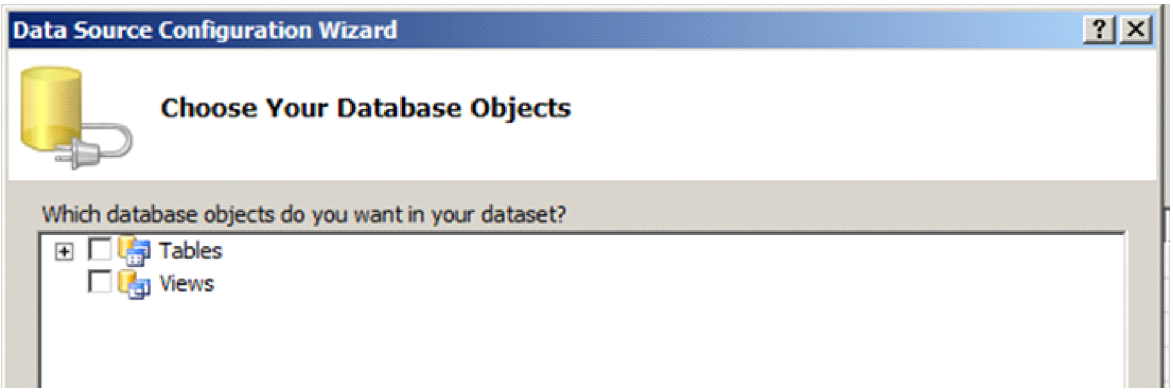
Next


Data Source Configuration Wizard
Choose Your Data Connection
Which data connection should your application use to connect to the database?
eb.accdb
New Connection...
This connection string appears to contain sensitive data (for example, a password), which is required to connect to the database. However, storing sensitive data in the connection string can be a security risk. Do you want to include this sensitive data in the connection string?
No, exclude sensitive data from the connection string. I will set this information in my application code.
Yes, include sensitive data in the connection string.
Connection string
< Previous
Next >
Finish
Cancel

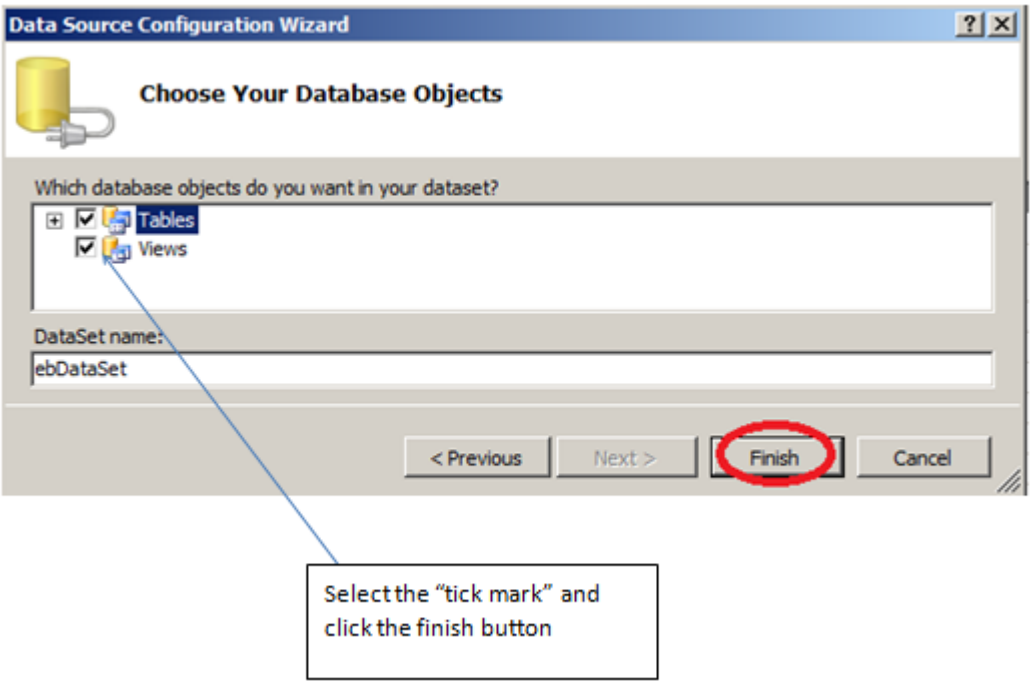
Next

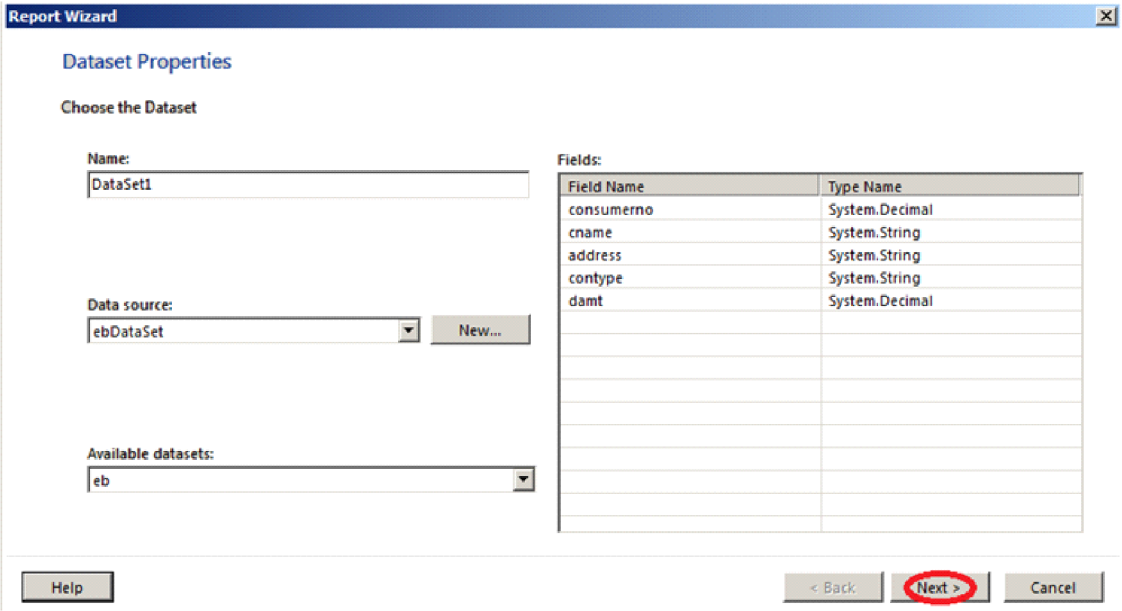

Data Source Configuration Wizard
Save the Connection String to the Application Configuration File
Storing connection strings in your application configuration file eases maintenance and deployment. To save the connection string in the application configuration file, enter a name in the box and then click Next.
Do you want to save the connection string to the application configuration file?
Yes, save the connection as:
ebConnectionString
< Previous
Next >
Finish
Cancel

Next

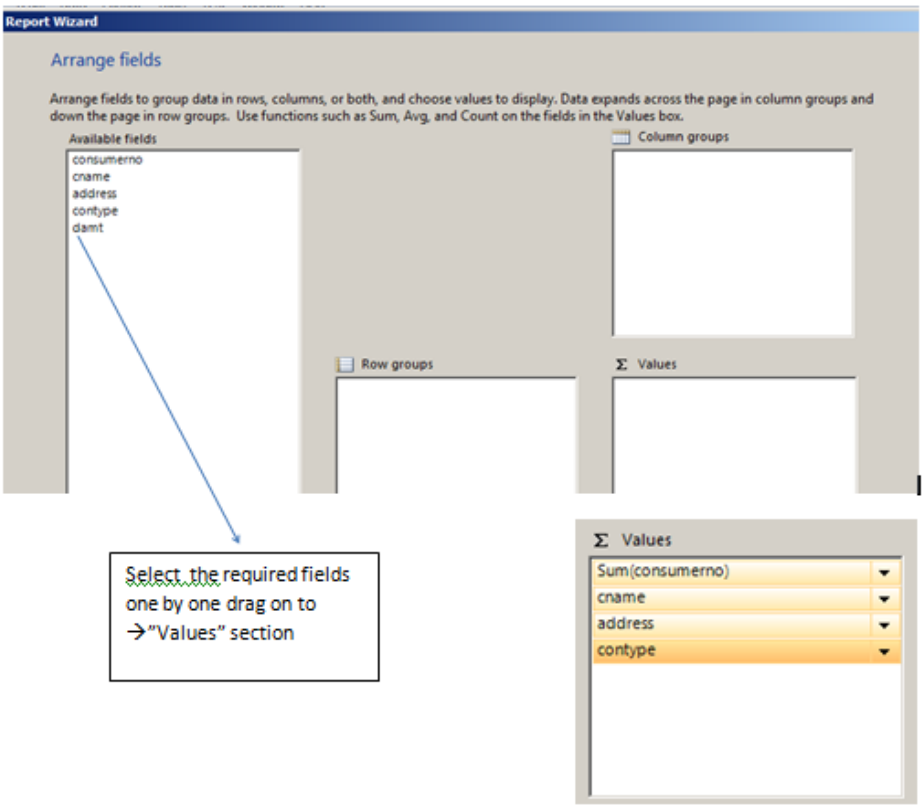

Data Source Configuration Wizard
Choose Your Database Objects
Which database objects do you want in your dataset?
Tables
Views

Next

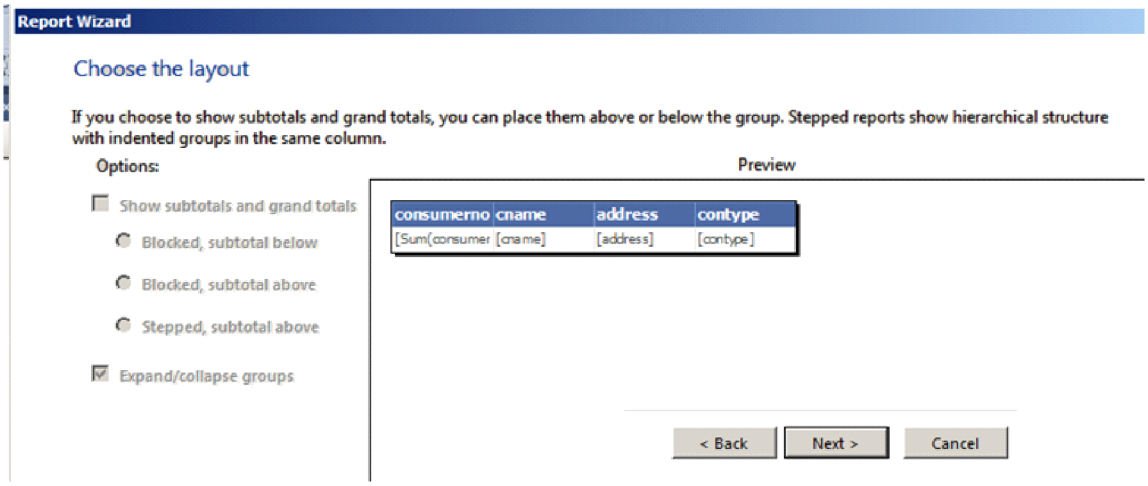

Data Source Configuration Wizard
Choose Your Database Objects
Which database objects do you want in your dataset?
Tables
Views
DataSet name:
ebDataSet
< Previous
Next >
Finish
Cancel
Select the "tick mark" and click the finish button

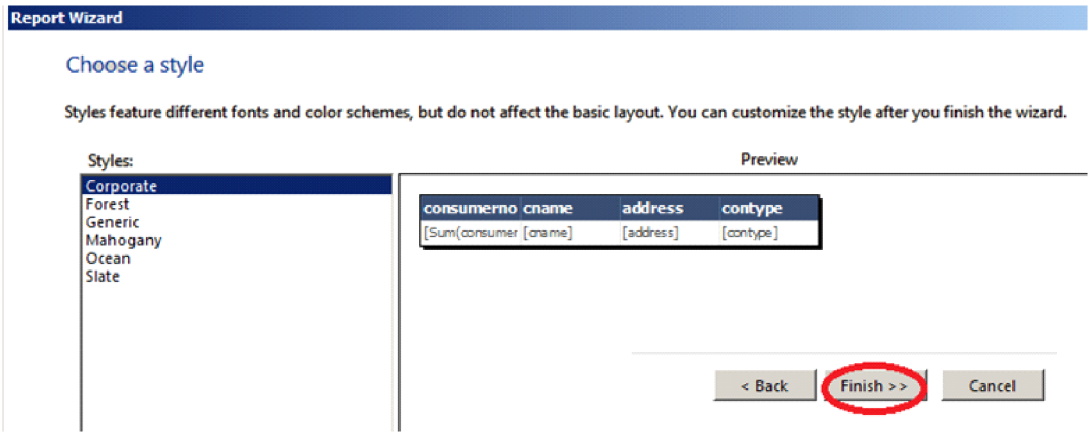

Report Wizard
Dataset Properties
Choose the Dataset
Name:
DataSet1
Fields:
Field Name
Type Name
consumerno
System.Decimal
cname
System.String
address
System.String
contype
System.String
damt
System.Decimal
Data source:
ebDataSet
New...
Available datasets:
eb
Help
< Back
Next >
Cancel

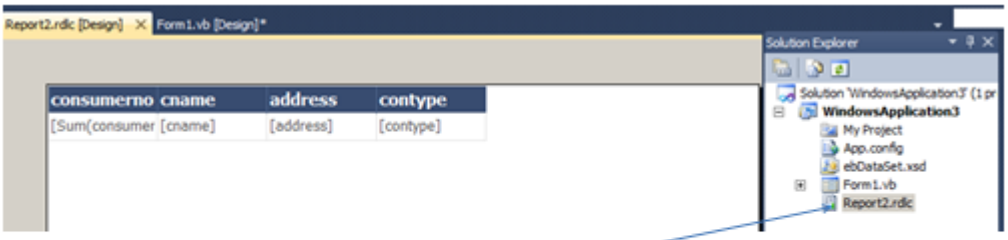
Next


Report Wizard
Arrange fields
Arrange fields to group data in rows, columns, or both, and choose values to display. Data expands across the page in column groups and down the page in row groups. Use functions such as Sum, Avg, and Count on the fields in the Values box.
Available fields
consumerno
cname
address
contype
damt
Column groups
Row groups
Values
Select the required fields one by one drag on to →"Values" section
Values
Sum(consumerno)
cname
address
contype

Next the layout will be displayed as follows



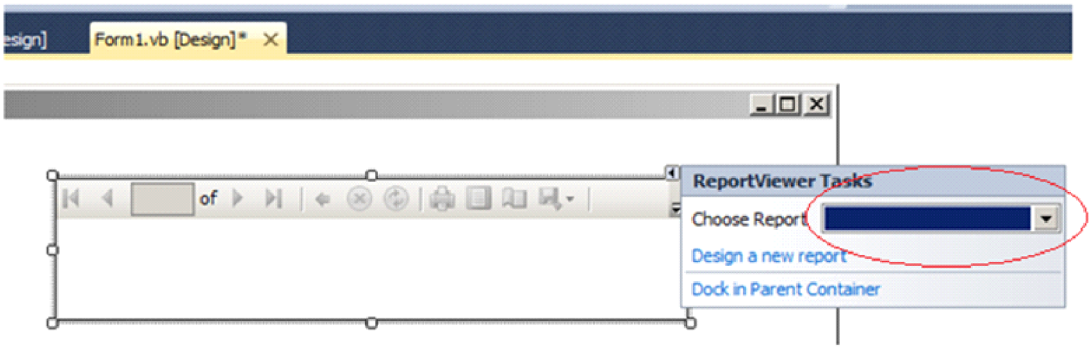


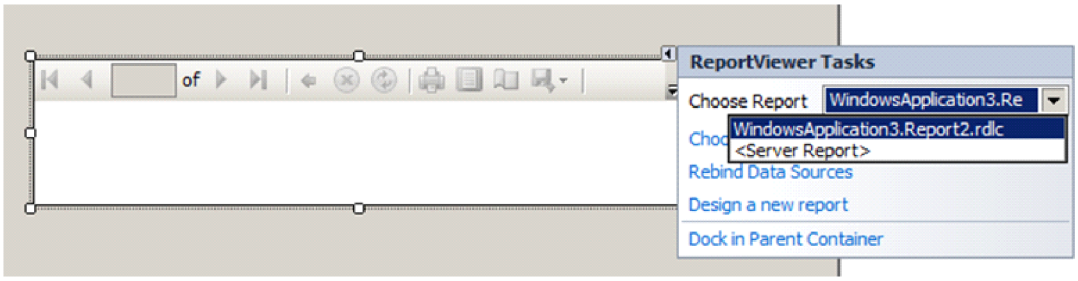


Now created

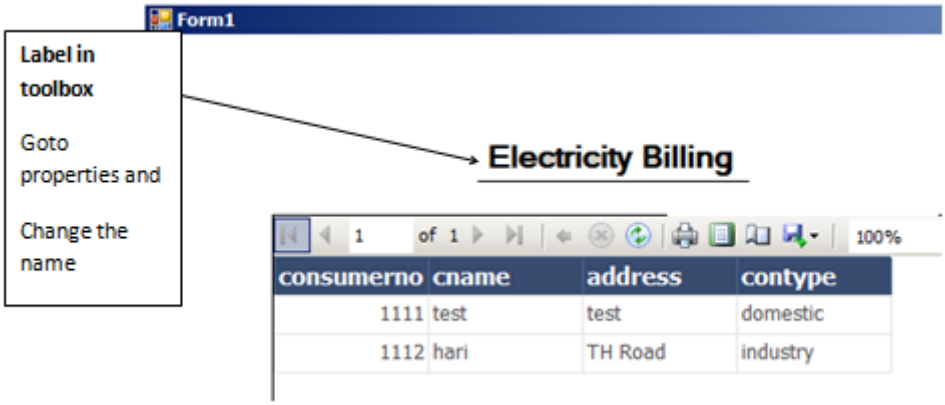
"**Report1.rdlc**" on the solution Explorer→ next goto **Form1.vb[design]**

next





Run the report form and get the report form



1. Aim : To create student database and produce Mark listfor the Students

Procedure

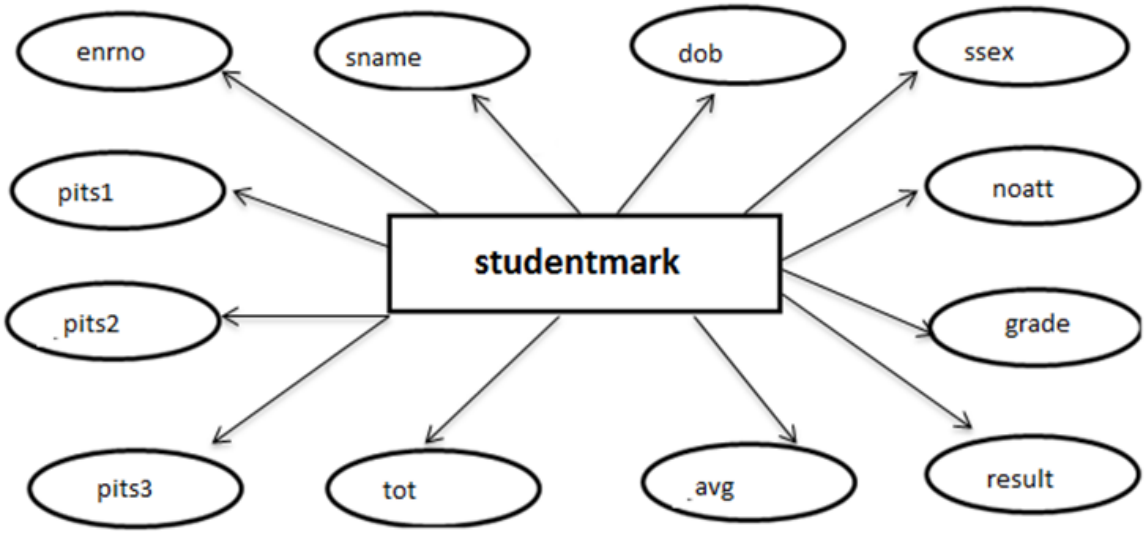
1) Creating a new project in windows applications.
2) Front End Application using - VB .Net 2010
3) Back End Application using - Microsoft Access 2010
4) In FILE menu select “NEW PROJECT”.
5) Give the name for Project “studentmarksheet” and click “OK”. Window with Form1.vb gets generated.
6) Select textboxes, labels, menu strips, combo box and buttons fromToolbox.
7) Set the properties of controls as below.
8) Build the Project and Execute by Start Debugging or by pressing F5.

Table structure

Table structure : studentmark

Field Name	Type
enrno	Currency
sname	Text
dob	Date/Time
ssex	Text
pits1	Currency
pits2	Currency
pits3	Currency
noatt	Currency
res	Text
tot	Currency
avg	Currency
grade	Text

ER Diagram:



RESULT:

Thus the program is compiled and executed successfully and the reports are obtained.

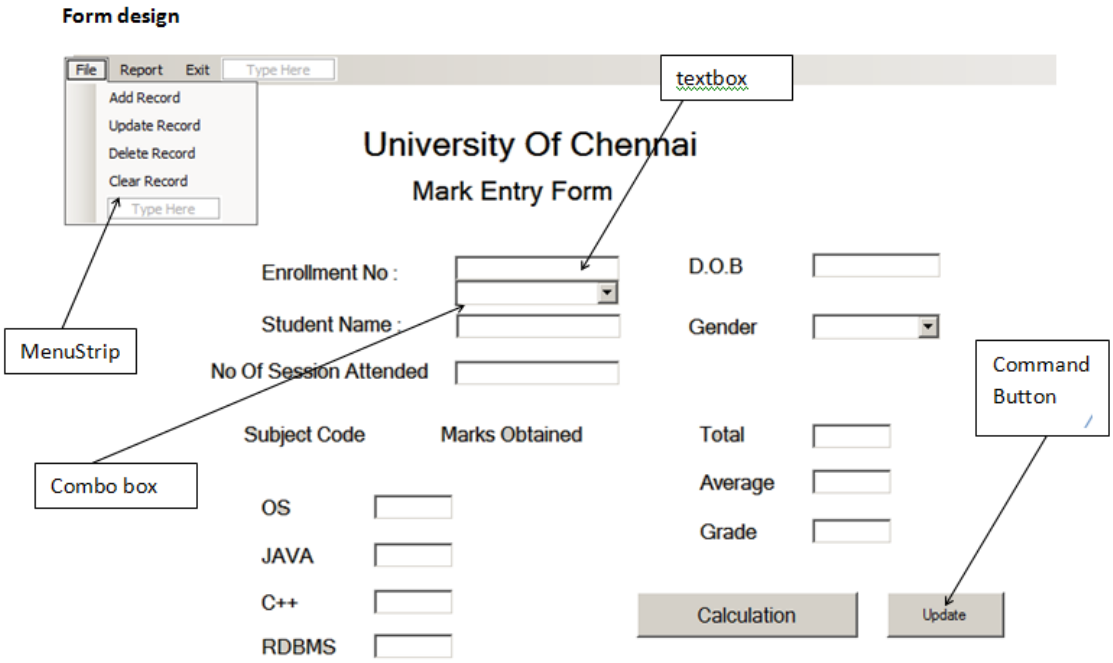
Student mark sheet processing

1. Designing the Form:
2. Step 1: Open Visual Studio 2010 → Windows Application
3. Step 2 : Create a menu use the Menu tooltrip

Table structure :student

Field Name	Type	Description
enrno	Currency	Enrollment Number
sname	Text	Name of the Student
dob	Date/Time	Date of Birth
ssex	Text	Gender
pits1	Currency	Mark
pits2	Currency	Mark
pits3	Currency	Mark
noatt	Currency	No of attendance
res	Text	Result
tot	Currency	Total
avg	Currency	Average
grade	Text	Grade

Form design



Setting Properties

Controls name	Properties	values
Label1	text	Enrollment No
Label2	text	Student Name
Label3	text	No Of Session Attended
Label4	text	D.O.B
Label5	text	Gender
Label6	text	Subject Code
Label7	text	Marks Obtained
Label8	text	OS
Label9	text	JAVA
Label10	text	C++
Label11	text	RDBMS
Label12	text	Total

Label13	text	Average
Label14	text	Grade
Textbox1	name	tenrno
Textbox2	name	tsname
Textbox3	name	tdob
Textbox4	name	tpits1
Textbox5	name	tpits2
Textbox6	name	tpits3
Textbox7	name	tpits4
Textbox8	name	tatt1
Textbox9	name	ttot
Textbox10	name	tavg
Textbox11	name	tres
Combo box1	name	tssex
Combo box2	name	combroll
MenuStrip1		

Form1.vb Coding

```
Imports System.Data.OleDb

Public Class Form1
        Dim con As New OleDbConnection
        Dim cmd As New OleDbCommand
        Dim dr As OleDbDataReader

Private Sub Form1_Load (ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles MyBase.Load
    Btupdate.Visible = False
    con =
    NewOleDbConnection("Provider=Microsoft.Jet.OLEDB.4.0;
            DataSource=C:\Users\Desktop\rdbms\
            WindowsApplication2\WindowsApplication2\student.mdb")
```

```
        con.Open()
        MsgBox("DB Connected")
        combroll.Visible = False
        cmd.Connection = con
        cmd.CommandText = "select max(enrno) from stu "
        dr = cmd.ExecuteReader()
        While dr.Read
          tenrno.Text = Val(dr(0).ToString()) + 1
        End While
        dr.Close()
    End Sub

Private Sub Calcul_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Calcul.Click
    ttot.Text = Convert.ToInt32(tpits1.Text) + Convert.ToInt32(tpits2.Text) +
            Convert.ToInt32(tpits3.Text) + Convert.ToInt32(tpits4.Text)
    tavg.Text = Val(ttot.Text) / 4
    If Val(tpits1.Text) < 50 Or Val(tpits2.Text) < 50 Or Val(tpits3.Text) < 50 Or Val(tpits4.Text)
            < 50 Then
    tres.Text = "fail"
    ElseIf Val(tavg.Text) > 49 And Val(tavg.Text) < 60 Then
    tres.Text = "Second"
    ElseIf Val(tavg.Text) > 60 And Val(tavg.Text) < 70 Then
    tres.Text = "First"
    ElseIf Val(tavg.Text) > 70 Then
    tres.Text = "Distinction"
    End If
    End Sub
```

```
Private Sub ExitToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles ExitToolStripMenuItem.Click
    End
    End Sub

Private Sub AddRecordToolStripMenuItem_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles AddRecordToolStripMenuItem.Click
        Dim result As String
        cmd.Connection = con
        Btupdate.Visible = False
    If (Val(tpits1.Text) < 50) Or Val(tpits2.Text) < 50 Or Val(tpits3.Text) < 50 Or
            Val(tpits4.Text) < 50 Then
    result = "Fail"
    ElseIf (Val(tpits1.Text) > 49 Or Val(tpits2.Text) > 49 Or Val(tpits3.Text) > 49 Or
            Val(tpits4.Text) > 49) Then
    result = "Pass"
    ElseIf tpits1.Text = "AAA" Or tpits2.Text = "AAA" Or tpits3.Text = "AAA" Or tpits4.Text =
            "AAA" Then
    result = "AAAA"
    End If
    cmd.CommandText = "insert into stuvalues(@enrno,@sname,@dob,@ssex,
            @pits1,@pits2, @pits3,@pits4,@noatt1,@res, @tot,@avg,@grade)"
    cmd.Parameters.AddWithValue("@enrno", tenrno.Text)
    cmd.Parameters.AddWithValue("@sname", tsname.Text)
    cmd.Parameters.AddWithValue("@dob", Convert.ToDateTime(tdob.Text))
    cmd.Parameters.AddWithValue("@ssex", tssex.Text)
        cmd.Parameters.AddWithValue("@pits1", Convert.ToInt32(tpits1.Text))
        cmd.Parameters.AddWithValue("@pits2", Convert.ToInt32(tpits2.Text))
        cmd.Parameters.AddWithValue("@pits3", Convert.ToInt32(tpits3.Text))
        cmd.Parameters.AddWithValue("@pits4", Convert.ToInt32(tpits4.Text))
        cmd.Parameters.AddWithValue("@noatt1", Convert.ToInt32(tatt1.Text))
```

```
        cmd.Parameters.AddWithValue("@res", result.ToString())
        cmd.Parameters.AddWithValue("@tot", Convert.ToInt32(ttot.Text))
        cmd.Parameters.AddWithValue("@avg", tavg.Text)
        cmd.Parameters.AddWithValue("@grade", tres.Text)
        cmd.ExecuteNonQuery()
        MsgBox("Record Added Successfully")
        cmd.Clone()
        con.Close()
    End Sub

Private Sub ClearRecordToolStripMenuItem_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles ClearRecordToolStripMenuItem.Click
        tenrno.Text = ""
        tsname.Text = ""
        tatt1.Text = ""
        tdob.Text = ""
        tpits1.Text = ""
        tpits2.Text = ""
        tpits3.Text = ""
        tpits4.Text = ""
        ttot.Text = ""
        tavg.Text = ""
        tres.Text = ""
    End Sub

Private Sub ReportToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
As System.EventArgs) Handles ReportToolStripMenuItem.Click
        report.Show()
        report.ReportViewer1.Show()
    End Sub
```

```
Private Sub tatt1_LostFocus(ByVal sender As Object, ByVal e As System.EventArgs)
Handles tatt1.LostFocus
        Dim a As Double
        a = (Val(tatt1.Text) / 32 * 100)
        If a < 50.0# Then
            MsgBox("Attendance Lack")
            tpits1.Enabled = False
            tpits2.Enabled = False
            tpits3.Enabled = False
            tpits4.Enabled = False
            ttot.Enabled = False
            tavg.Enabled = False
            tres.Enabled = False
            Calcul.Enabled = False
            tpits1.Text = 0
            tpits2.Text = 0
            tpits3.Text = 0
            tpits4.Text = 0
            ttot.Text = 0
            tavg.Text = 0
            tres.Text = ""
        Else
            tpits1.Enabled = True
            tpits2.Enabled = True
            tpits3.Enabled = True
            tpits4.Enabled = True
            ttot.Enabled = True
            tavg.Enabled = True
            tres.Enabled = True
            Calcul.Enabled = True
        End If
    End Sub
```

```
Private Sub DeleteRecordToolStripMenuItem_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles DeleteRecordToolStripMenuItem.Click
        Dim n As String, f As Integer, dstr As String
        n = InputBox("Enter the Student Roll No to be Deleted")
        Btupdate.Visible = False
        cmd.Connection = con
        cmd.CommandText = "select * from stu"
        dr = cmd.ExecuteReader()
        While (dr.Read())
          If dr("enrno").ToString() = n Then
            cmd = New OleDbCommand("delete from stu where enrno =@enrno", con)
            cmd.Parameters.AddWithValue("@enrno", n)
            cmd.ExecuteNonQuery()
            MsgBox("record deleted ")
            f = 1
          End If
        End While
        dr.Close()
        If f = 0 Then
          MsgBox("Record not found")
        End If
        dr.Close()
      End Sub

Private Sub UpdateRecordToolStripMenuItem_Click(ByVal sender As System.Object,
ByVal e As System.EventArgs) Handles UpdateRecordToolStripMenuItem.Click
        Btupdate.Visible = True
        combroll.Visible = True
        tenrno.Visible = False
        cmd.Connection = con
```

```
        cmd.CommandText = “select * from stu”
        dr = cmd.ExecuteReader()
        While dr.Read()
            combroll.Items.Add(dr(“enrno”).ToString)
        End While
        dr.Close()
    End Sub
```

Private Sub combroll_SelectedValueChanged(ByVal sender As Object, ByVal e As System.EventArgs) Handles combroll.SelectedValueChanged

```
        cmd.Connection = con
        cmd.CommandText = “select * from stu where enrno=@enrno”
        cmd.Parameters.AddWithValue(“@enrno”, combroll.SelectedItem)
        dr = cmd.ExecuteReader()
        While dr.Read()
            tsname.Text = dr(1).ToString
            tdob.Text = dr(2).ToString
            tssex.Text = dr(3).ToString
            tpits1.Text = dr(4).ToString
            tpits2.Text = dr(5).ToString
            tpits3.Text = dr(6).ToString
            tpits4.Text = dr(7).ToString
            tatt1.Text = dr(8).ToString
        End While
        dr.Close()
    End Sub
```

```
Private Sub Btupdate_Click(ByVal sender As System.Object, ByVal e As
System.EventArgs) Handles Btupdate.Click
        Dim s As String
    s = "update stu set Sname=?,dob=?,SSex=?,pits1=?,pits2=?,pits3=?,
            pits4=?,Noatt1=?,tot=?,grade=? where enrno=?"
        cmd = New OleDbCommand(s, con)
        cmd.Parameters.AddWithValue("@sname", tsname.Text)
        cmd.Parameters.AddWithValue("@dob", Convert.ToDateTime(tdob.Text))
        cmd.Parameters.AddWithValue("@ssex", tssex.Text)
        cmd.Parameters.AddWithValue("@pits1", Convert.ToInt32(tpits1.Text))
        cmd.Parameters.AddWithValue("@pits2", Convert.ToInt32(tpits2.Text))
        cmd.Parameters.AddWithValue("@pits3", Convert.ToInt32(tpits3.Text))
        cmd.Parameters.AddWithValue("@pits4", Convert.ToInt32(tpits4.Text))
        cmd.Parameters.AddWithValue("@noatt1", Convert.ToInt32(tatt1.Text))
        cmd.Parameters.AddWithValue("@tot", Convert.ToInt32(ttot.Text))
        cmd.Parameters.AddWithValue("@grade", tres.Text)
        cmd.Parameters.AddWithValue("@enrno",
            Convert.ToInt32(combroll.SelectedItem))
        cmd.ExecuteNonQuery()
        MsgBox("Records Updated Successfully")
        Btupdate.Visible = False
    End Sub
End Class
```

Output:

File Report Exit

University Of Chennai

Mark Entry Form

Enrollment No : 2

D.O.B 2/21/1989

Student Name : Rani

Gender Female

No Of Session Attended 34

Subject Code Marks Obtained

Total 276

Average 69

Grade First

OS 65

JAVA 65

C++ 68

RDBMS 78

Calculation

Report

University Of Chennai

1 of 1 100% Find | Next

Enrollment No	Name	Attendance	Gender	Total	Average	Grade
2	Rani	34	Female	276	69	First
3	Selvi	18	Male	312	78	Distinction
4	Raja	23	Female	291	72.75	Distinction
5	Hari	34	Male	257	64.25	First

Back

2. Aim : To create Electricity master and transaction tables and produce the EB bill for the customer.

Table structure

Table Name: eb

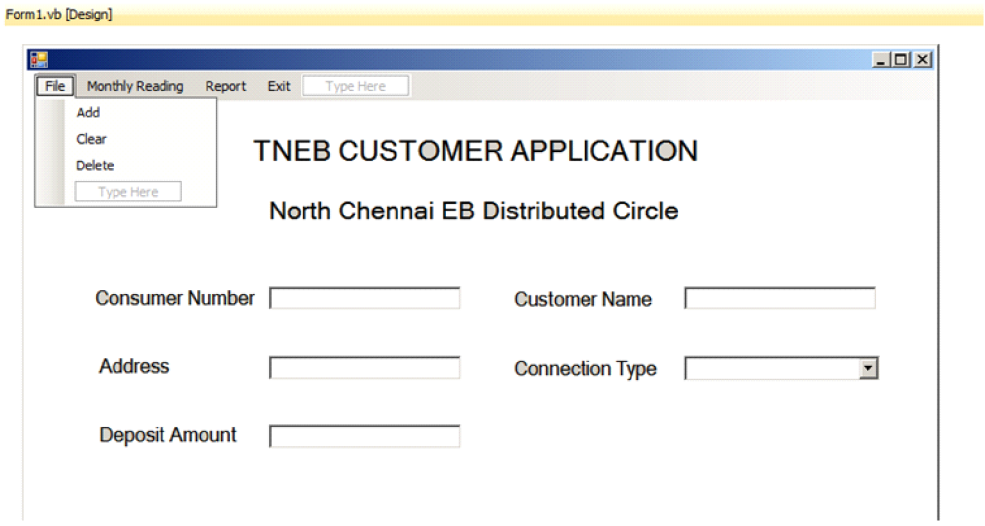
ELECTRICITY BILL PROCESSING

Field Name	Type	Description
consumerno	Currency	Serial Number
Cname	Text	Name of the Customer
Address	Text	Address of the customer
Contype	Text	Connection Type
Damt	Currency	Deposit Amount

Table Name: **trans**

Field Name	Type	Description
Cname	Text	Customer Number
consumerno	Currency	Meter Number
Contype	Text	Connection Type
Preread	Currency	Previous Reading
Curread	Currency	Current Reading
Units	Currency	No of Units
Amount	Currency	Amount
Mrdate	Date/Time	Meter Reading Date

Form 1



Coding

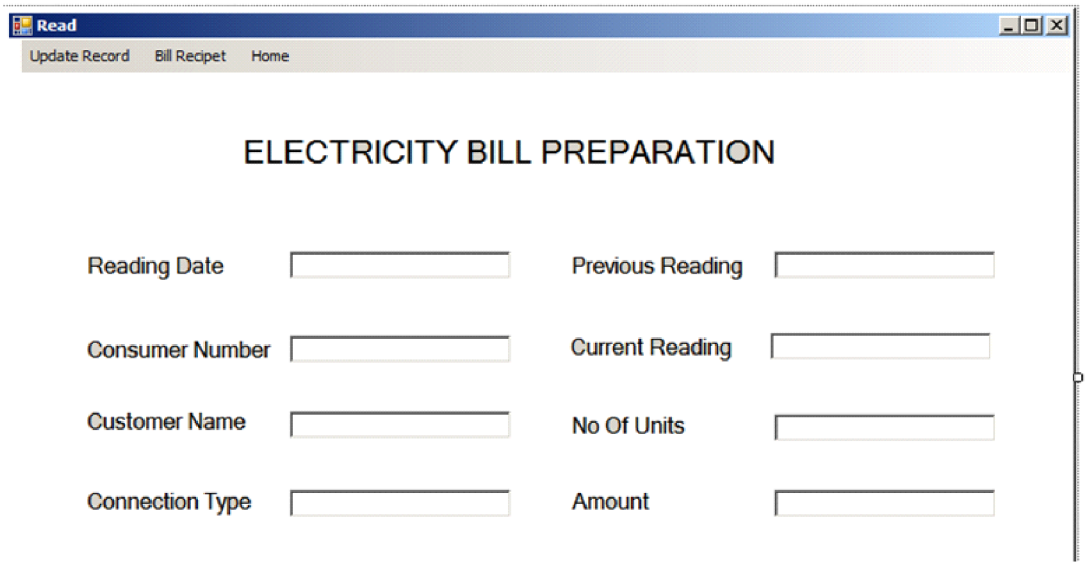
Form1.vb

```
Imports ADODB
Public Class Form1
   Dim con As New ADODB.Connection
   Dim rs As New ADODB.Recordset
   Dim cmd As New ADODB.Command
   Dim flag As Integer = 1
   Dim str As String

Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles MyBase.Load
str = “”
     combcontype.Items.Add(“Domestic”)
     combcontype.Items.Add(“Industry”)
con.Open(“Provider=Microsoft.ACE.OLEDB.12.0;DataSource=C:\Users\dell\Desktop\rdbms
        \Eb bill\Eb bill\eb.accdb”)
     MsgBox(“Connected”)
     cmd.ActiveConnection = con
     cmd.CommandText = “select max(consumerno) from eb”
     rs = cmd.Execute()
     tconsumerno.Text = (Val(rs.Fields(0).Value) + 1).ToString
   End Sub

Private Sub AdToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles AdToolStripMenuItem.Click
‘rs = con.Execute(“insert into eb values (@sno)”)
cmd.ActiveConnection = con
cmd.CommandText = “insert into eb
        values(@consumerno,@cname,@address,@contype,@damt)”
     cmd.Parameters.Item(0).Value = Convert.ToDouble(tconsumerno.Text)
```

```
    cmd.Parameters.Item(1).Value = tcustname.Text
    cmd.Parameters.Item(2).Value = taddress.Text
    cmd.Parameters.Item(3).Value = combcontype.SelectedItem.ToString
    cmd.Parameters.Item(4).Value = Convert.ToDouble(tdepamt.Text)
    cmd.Execute()
    MsgBox("Inserted")
  End Sub

Private Sub ReportToolStripMenuItem_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles ReportToolStripMenuItem.Click
    Me.Hide()
    Report.Show()
    Report.ReportViewer2.Show()
    Report.ReportViewer1.Hide()
    Report.Label1.Visible = False
    Report.Label2.Text = " EB Account Holder Report"
  End Sub

Private Sub ClearToolStripMenuItem_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles ClearToolStripMenuItem.Click
    tconsumerno.Text = ""
    tcustname.Text = ""
    taddress.Text = ""
    tdepamt.Text = ""
  End Sub

Private Sub ExitToolStripMenuItem_Click(ByVal sender As System.Object, ByVal
        e As System.EventArgs) Handles ExitToolStripMenuItem.Click
    En  Sub
```

```
Private Sub MonthlyReadingToolStripMenuItem_Click(ByVal sender As
        System.Object, ByVale As System.EventArgs) Handles
        MonthlyReadingToolStripMenuItem.Click
    Me.Hide()
    Read.Show()
  End Sub
End Class

Private Sub DeleteToolStripMenuItem_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles DeleteToolStripMenuItem.Click
    cmd.ActiveConnection = con
    Dim no As Integer = Val(InputBox("Enter the Consumer no"))
    cmd.CommandText = "select * from eb "
    rs = cmd.Execute()
    Do Until rs.EOF
      If rs.Fields(0).Value = no Then
        cmd.CommandText = "delete * from eb where sno=@sno"
        cmd.Parameters.Item(0).Value = no
        cmd.Execute()
        MsgBox("Record Deleted")
        flag = 0
        Exit Do
      End If
      rs.MoveNext()
    Loop
    If flag = 1 Then
      MsgBox("Record Not Found")
    End If
  End Sub
```

Form2:



Read.vb

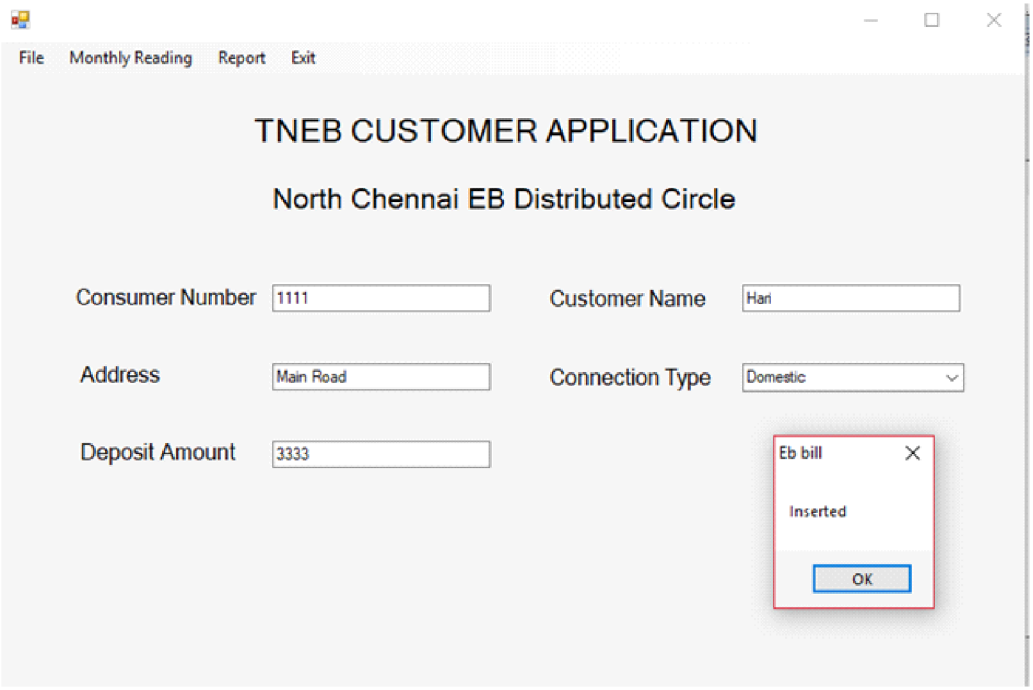
```
Public Class Read
   Dim con As New ADODB.Connection
   Dim rs As New ADODB.Recordset
   Dim cmd As New ADODB.Command
   Dim flag As Integer = 1
   Dim str As String
 Private Sub Read_Load(ByVal sender As System.Object, ByVal e As
          System.EventArgs) Handles MyBase.Load
con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
          Source=C:\Users\dell\Desktop\rdbms\Eb bill\Eb bill\eb.accdb")
Msgbox"DB conncected"
      treaddate.Text = Date.Now
     treaddate.Select()
End Sub
```

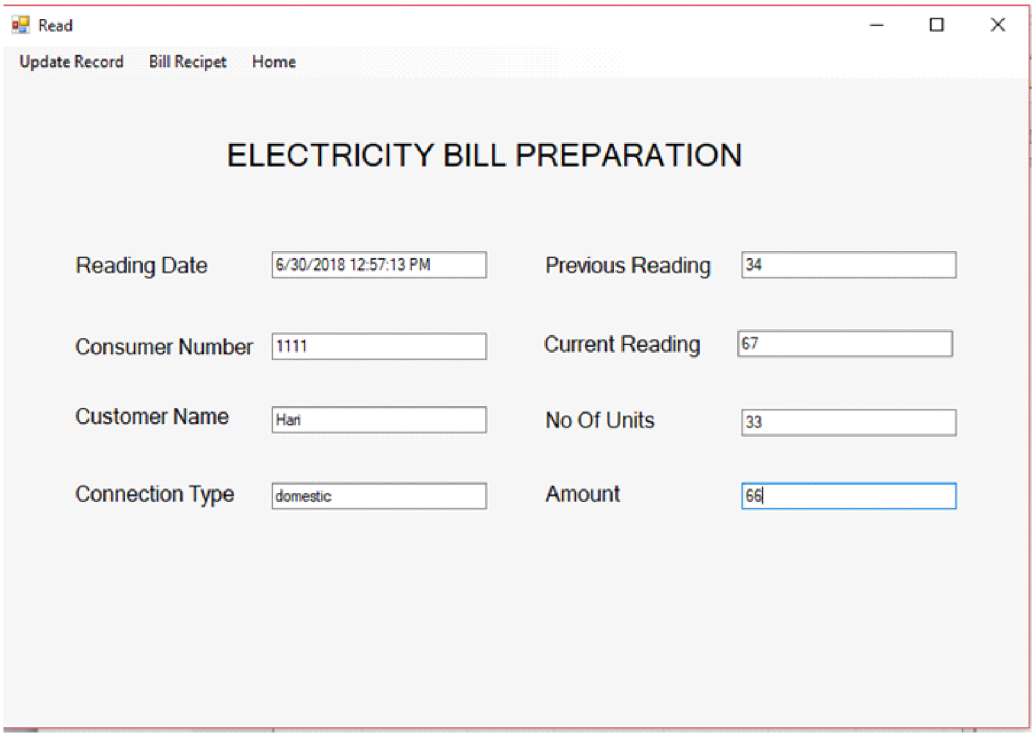
```
Private Sub UpdateRecordToolStripMenuItem_Click(ByVal sender As
        System.Object, ByVal e As System.EventArgs) Handles
        UpdateRecordToolStripMenuItem.Click
    cmd.ActiveConnection = con
cmd.CommandText = "insert into trans values
        (@cname,@consumemo,@contype,@preread,@curread,@units,@amount,@mrdate)"
    cmd.Parameters.Item(0).Value = Val(tconsumer.Text)
    cmd.Parameters.Item(1).Value = tcustname.Text
    cmd.Parameters.Item(2).Value = tcontype.Text
    cmd.Parameters.Item(3).Value = Val(tpreread.Text)
    cmd.Parameters.Item(4).Value = Val(tcurread.Text)
    cmd.Parameters.Item(5).Value = Val(tunits.Text)
    cmd.Parameters.Item(6).Value = Val(tamount.Text)
    cmd.Parameters.Item(7).Value = CDate(treaddate.Text)
    cmd.Execute()
    MsgBox(" Record Updated")
  End Sub

Private Sub tcurread_LostFocus(ByVal sender As Object, ByVal e As
        System.EventArgs) Handles tcurread.LostFocus
tunits.Text = (Convert.ToDouble(tcurread.Text) -
        Convert.ToDouble(tpreread.Text)).ToString
End Sub

Private Sub tunits_LostFocus(ByVal sender As Object, ByVal e As
        System.EventArgs) Handles tunits.LostFocus
    If tcontype.Text = "domestic" Then
      If Val(tunits.Text) < 100 Then
        tamount.Text = 2 * Val(tunits.Text)
      ElseIf Val(tunits.Text) > 100 And Val(tunits.Text) < 200 Then
```

```
            tamount.Text = 100 + (Val(tunits.Text) - 100) * 3
        ElseIf Val(tunits.Text) > 200 Then
            tamount.Text = 100 + 300 + (Val(tunits.Text) - 200) * 5
        End If
    End If
    If tcontype.Text = “commerical” Then
        If Val(tunits.Text) < 100 Then
            tamount.Text = 4.5 * Val(tunits.Text)
        ElseIf Val(tunits.Text) > 100 And Val(tunits.Text) < 200 Then
            tamount.Text = 450 + (Val(tunits.Text) - 100) * 3.5
        ElseIf Val(tunits.Text) > 200 Then
            tamount.Text = 450 + 750 + (Val(tunits.Text) - 200) * 10
        End If
    End If
End Sub

Private Sub BillRecipetToolStripMenuItem_Click(ByVal sender As
        System.Object, ByVal e As System.EventArgs) Handles
        BillRecipetToolStripMenuItem.Click
    Me.Hide()
    Report.Show()
    Report.ReportViewer1.Show()
    Report.ReportViewer2.Hide()
    Report.Label1.Visible = True
    Report.Label2.Text = “ Bill Receipt”
End Sub
```

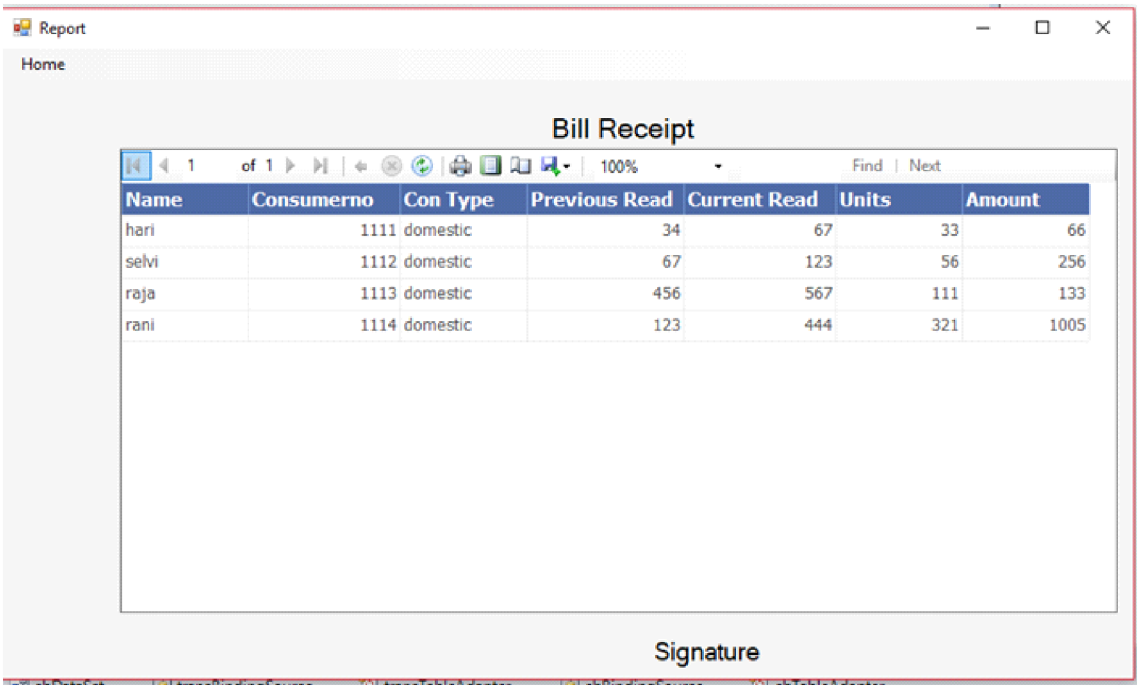
```
Private Sub HomeToolStripMenuItem_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles HomeToolStripMenuItem.Click
    Me.Hide()
    Form1.Show()
  End Sub

Private Sub tconsumer_LostFocus(ByVal sender As Object, ByVal e As
        System.EventArgs) Handles tconsumer.LostFocus
    cmd.ActiveConnection = con
    cmd.CommandText = "select * from eb where consumerno=@consumerno"
    cmd.Parameters.Item(0).Value = tconsumer.Text
    rs = cmd.Execute()
    Do Until rs.EOF
      tcustname.Text = rs.Fields(1).Value
      tcontype.Text = rs.Fields(3).Value
      rs.MoveNext()
      flag = 0
    Loop
    If flag = 1 Then
      MsgBox("Enter Valid Consumer Number")
    End If
  End Sub
End Class
```

Output

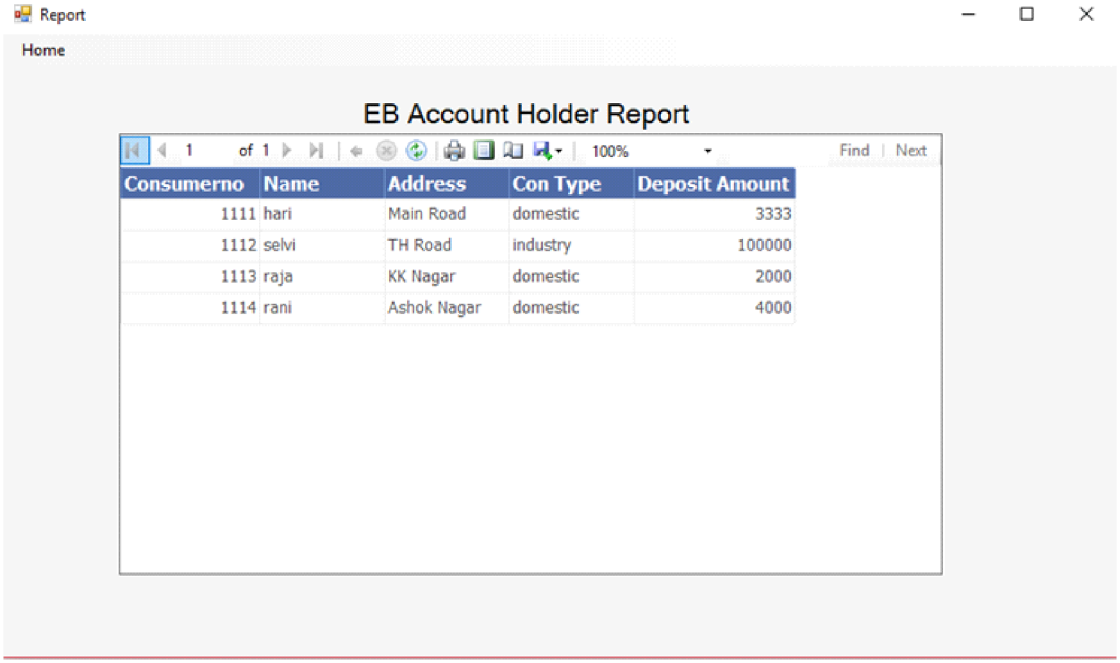

File
Monthly Reading
Report
Exit
TNEB CUSTOMER APPLICATION
North Chennai EB Distributed Circle
Consumer Number
1111
Customer Name
Hari
Address
Main Road
Connection Type
Domestic
Deposit Amount
3333
Eb bill
Inserted
OK


Read
Update Record
Bill Recipet
Home
ELECTRICITY BILL PREPARATION
Reading Date
6/30/2018 12:57:13 PM
Previous Reading
34
Consumer Number
1111
Current Reading
67
Customer Name
Hari
No Of Units
33
Connection Type
domestic
Amount
66

Report



Name	Consumerno	Con Type	Previous Read	Current Read	Units	Amount
hari	1111	domestic	34	67	33	66
selvi	1112	domestic	67	123	56	256
raja	1113	domestic	456	567	111	133
rani	1114	domestic	123	444	321	1005



Consumerno	Name	Address	Con Type	Deposit Amount
1111	hari	Main Road	domestic	3333
1112	selvi	TH Road	industry	100000
1113	raja	KK Nagar	domestic	2000
1114	rani	Ashok Nagar	domestic	4000

4. Aim : To create master and transaction tables for Gas connection and Booking respectively. Process and generate Report gor the same.

Table Structure

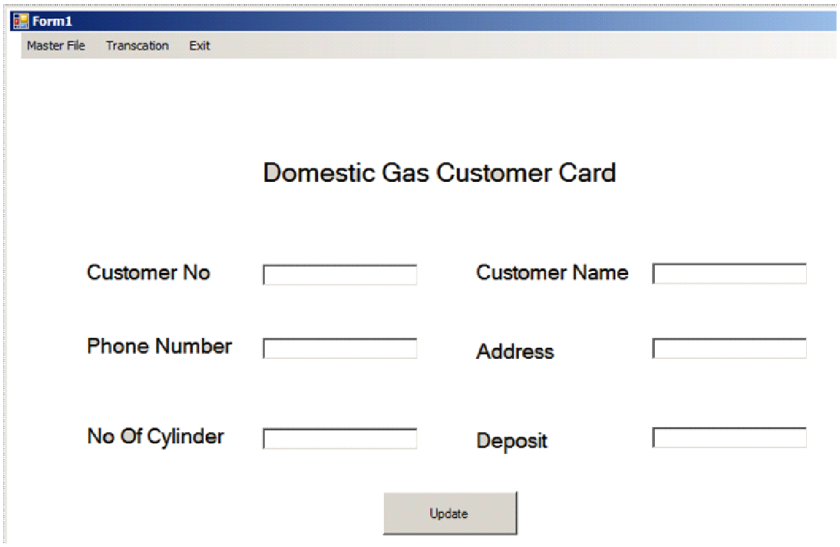
GAS BOOKING

Field Name	Type	Description
custno	Currency	Customer Number
custname	Text	Name of the Customer
custaddr	Text	Address of the customer
phone	Currency	Phone Number
nocylin	Currency	No of cylinder
damt	Currency	Deposit Amount

Table Name: **trans**

Field Name	Type	Description
custno	Currency	Customer Number
custname	Text	Name of the Customer
address	Text	Address of the customer
cphone	Currency	Phone Number
bookingno	Currency	Cylinder Booking Number
bdate	Date/Time	Booking Date
ddate	Date/Time	Delivery Date
billamt	Currency	Bill Amount

Form1



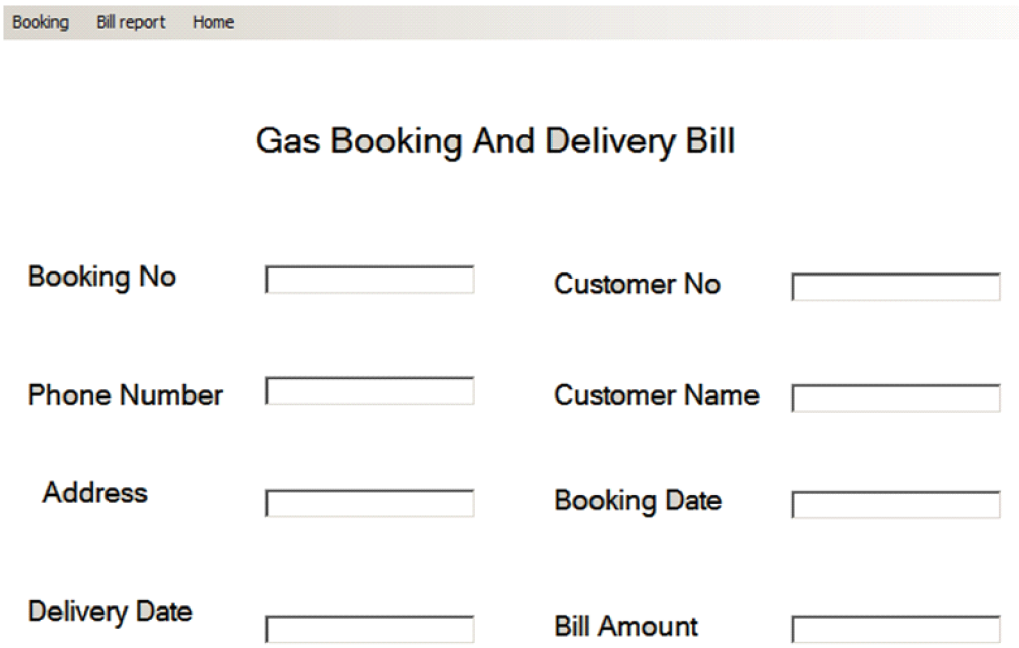
```
Imports ADODB
Public Class Form1
   Dim con As New ADODB.Connection
   Dim rs As New ADODB.Recordset
   Dim cmd As New ADODB.Command
   Dim flag As Integer = 1
   Dim no As Double
   Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles MyBase.Load
con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
            Source=C:\Users\dell\Desktop\rdbms\Gasbooking\gas.accdb")
      bupdate.Visible = False
      MsgBox("Connected")
   End Sub

   Private Sub AddToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles AddToolStripMenuItem.Click
         bupdate.Visible = False
         cmd.ActiveConnection = con
cmd.CommandText = "insert into gas
            values(@custno,@custname,@custaddr,@phone,@nocylin,@damt)"
         cmd.Parameters.Item(0).Value = Val(tcustno.Text)
         cmd.Parameters.Item(1).Value = tcustname.Text
         cmd.Parameters.Item(2).Value = taddress.Text
         cmd.Parameters.Item(3).Value = Val(tpho.Text)
         cmd.Parameters.Item(4).Value = Val(tcylin.Text)
         cmd.Parameters.Item(5).Value = Val(tdept.Text)
         cmd.Execute()

         MsgBox("Added")
   End Sub
```

```
Private Sub DeleteToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles DeleteToolStripMenuItem.Click
    bupdate.Visible = False
    cmd.ActiveConnection = con
    no = Val(InputBox("Enter the Customer No "))
    disp()
    If flag = 0 Then
        cmd.CommandText = "delete * from gas where custno=@custno"
        cmd.Parameters.Item(0).Value = no
        rs = cmd.Execute()
        MsgBox(" Record Deleted")
    End If
  End Sub

Private Sub ExitToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles ExitToolStripMenuItem.Click
    End
  End Sub

  Private Sub UpdateToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles UpdateToolStripMenuItem.Click
    no = Val(InputBox("Enter customer Customer No"))
    disp()
    bupdate.Visible = True
  End Sub
  Public Function disp()
    cmd.ActiveConnection = con
    cmd.CommandText = "select * from gas where custno=@custno"
    cmd.Parameters.Item(0).Value = no
    rs = cmd.Execute()
```

```
        Do Until rs.EOF
            tcustno.Text = Val(rs.Fields(0).Value)
            tcustname.Text = rs.Fields(1).Value
            taddress.Text = rs.Fields(2).Value
            tpho.Text = Val(rs.Fields(3).Value)
            tcylin.Text = Val(rs.Fields(4).Value)
            tdept.Text = Val(rs.Fields(5).Value)
            rs.MoveNext()
            flag = 0
        Loop
        If flag = 1 Then
            MsgBox(" Invalid Customer No")
            bupdate.Visible = False
        End If
    End Function

    Private Sub bupdate_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles bupdate.Click
cmd.CommandText = "update gas set
            custno=?,custname=?,custaddr=?,nocylin=?,damt=? where phone=?"
        cmd.Parameters.Item(0).Value = Val(tcustno.Text)
        cmd.Parameters.Item(1).Value = tcustname.Text
        cmd.Parameters.Item(2).Value = taddress.Text
        cmd.Parameters.Item(4).Value = Val(tcylin.Text)
        cmd.Parameters.Item(5).Value = Val(tdept.Text)
        cmd.Parameters.Item(3).Value = Val(tpho.Text)
        cmd.Execute()
        MsgBox(" Record Updated")
        bupdate.Visible = False
    End Sub
```

```
  Private Sub TranscationToolStripMenuItem_Click(ByVal sender As System.Object,
          ByVal e As System.EventArgs) Handles TranscationToolStripMenuItem.Click
     Me.Hide()
     trans.Show()
  End Sub
End Class
```

Trans.vb (coding)



Coding

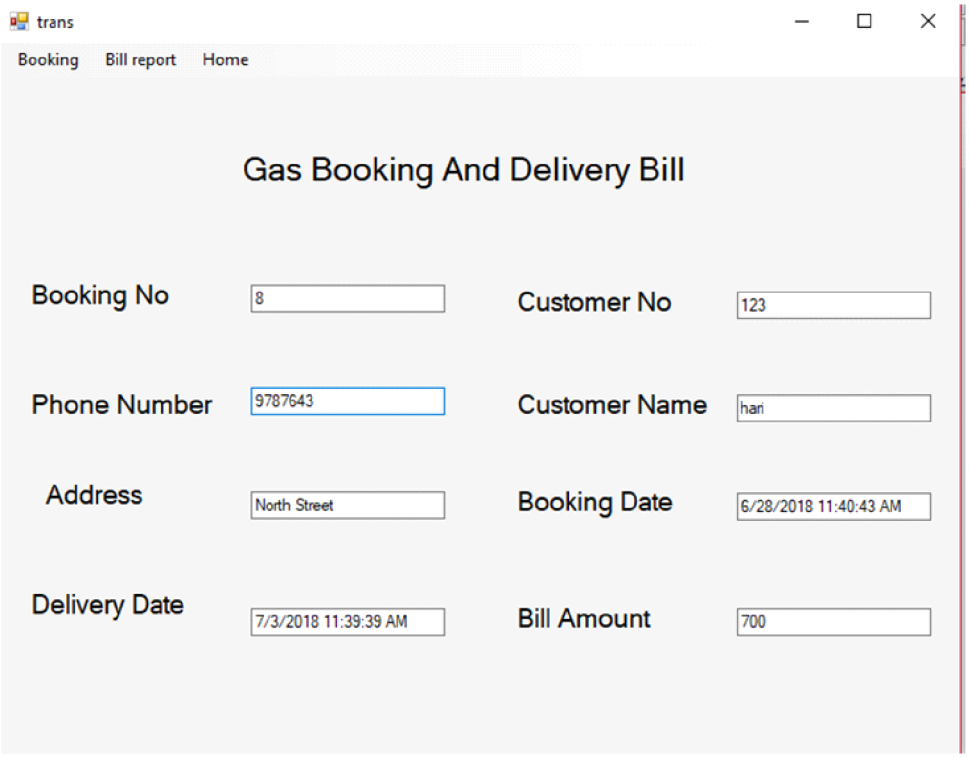
```
Public Class trans
   Dim con As New ADODB.Connection
   Dim rs As New ADODB.Recordset
   Dim cmd As New ADODB.Command
   Dim flag As Integer = 1
   Dim no As Double
```

```
Private Sub trans_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles MyBase.Load
con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\Gasbooking\gas.accdb",
        UserID:="Admin", Password:="")
    cmd.ActiveConnection = con
            cmd.CommandText = "select max(bookingno) from trans"
    rs = cmd.Execute()
    tbookno.Text = rs.Fields(0).Value + 1
End Sub

Private Sub BookingToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles BookingToolStripMenuItem.Click
    cmd.ActiveConnection = con
    cmd.CommandText = "insert into trans
        values(@custno,@custname,@custaddr,@phone,@booingno,@bdate,ddate,billamt)"
    cmd.Parameters.Item(0).Value = Val(tcustno.Text)
    cmd.Parameters.Item(1).Value = tcustname.Text
    cmd.Parameters.Item(2).Value = taddress.Text
    cmd.Parameters.Item(3).Value = Val(tpho.Text)
    cmd.Parameters.Item(4).Value = Val(tbookno.Text)
    cmd.Parameters.Item(5).Value = Convert.ToDateTime(tbdate.Text)
    cmd.Parameters.Item(6).Value = Convert.ToDateTime(tddate.Text)
    cmd.Parameters.Item(7).Value = Val(tbamt.Text)
    cmd.Execute()
    MsgBox("Cylinder Booked")
    clr()
End Sub
```

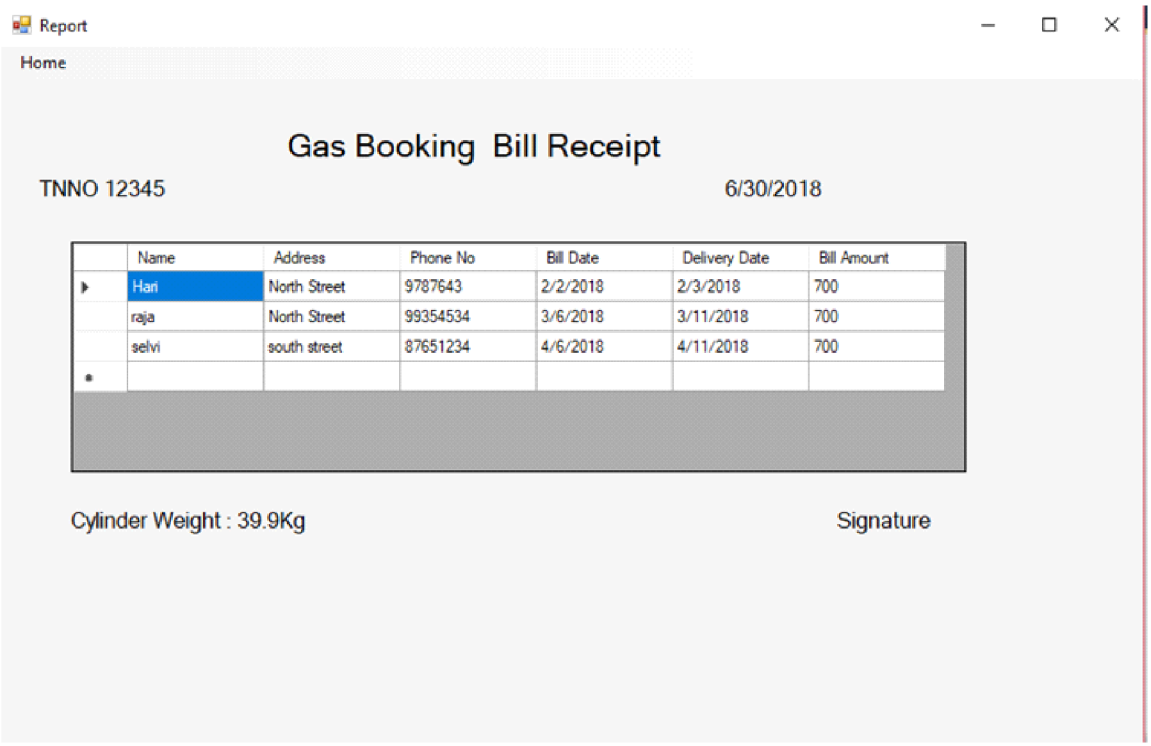
```
Private Sub HomeToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles HomeToolStripMenuItem.Click
    Me.Hide()
    Form1.Show()
End Sub
Function clr()
    tcustname.Text = “”
    tcustno.Text = “”
    taddress.Text = “”
    tpho.Text = “”
    tbookno.Text = “”
    tbamt.Text = “”
    tbdate.Text = “”
    tddate.Text = “”
End Function

Private Sub BillReportToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles BillReportToolStripMenuItem.Click
    Me.Hide()
    Report.Show()
    Report.DataGridView1.Show()
End Sub

Private Sub tcustno_LostFocus(ByVal sender As Object, ByVal e As
        System.EventArgs) Handles tcustno.LostFocus
    cmd.ActiveConnection = con
    cmd.CommandText = “select custname,phone,custaddr from gas where
        custno=?”
    cmd.Parameters.Item(0).Value = tcustno.Text
    rs = cmd.Execute()
```

```
        Do Until rs.EOF
            tcustname.Text = rs.Fields(0).Value
            tpho.Text = rs.Fields(1).Value
            taddress.Text = rs.Fields(2).Value
            rs.MoveNext()
            flag = 0
            tbdate.Text = Date.Now
        Loop
        If flag = 1 Then
            MsgBox("Enter valid Customer Number")
        End If
    End Sub

    Private Sub tbdate_LostFocus(ByVal sender As Object, ByVal e As System.EventArgs)
            Handles tbdate.LostFocus
        tddate.Text = Convert.ToDateTime(tbdate.Text).AddDays(5).ToString
        tbamt.Text = 700
    End Sub
End Class
```

Output


trans
Booking
Bill report
Home
Gas Booking And Delivery Bill
Booking No
8
Customer No
123
Phone Number
9787643
Customer Name
hari
Address
North Street
Booking Date
6/28/2018 11:40:43 AM
Delivery Date
7/3/2018 11:39:39 AM
Bill Amount
700

Report


Report
Home
Gas Booking Bill Receipt
TNNO 12345
6/30/2018
Name | Address | Phone No | Bill Date | Delivery Date | Bill Amount
Hari | North Street | 9787643 | 2/2/2018 | 2/3/2018 | 700
raja | North Street | 99354534 | 3/6/2018 | 3/11/2018 | 700
selvi | south street | 87651234 | 4/6/2018 | 4/11/2018 | 700
Cylinder Weight : 39.9Kg
Signature

4. Aim : To create master and transation table for BANKaccount TRANSACTION and generate report.

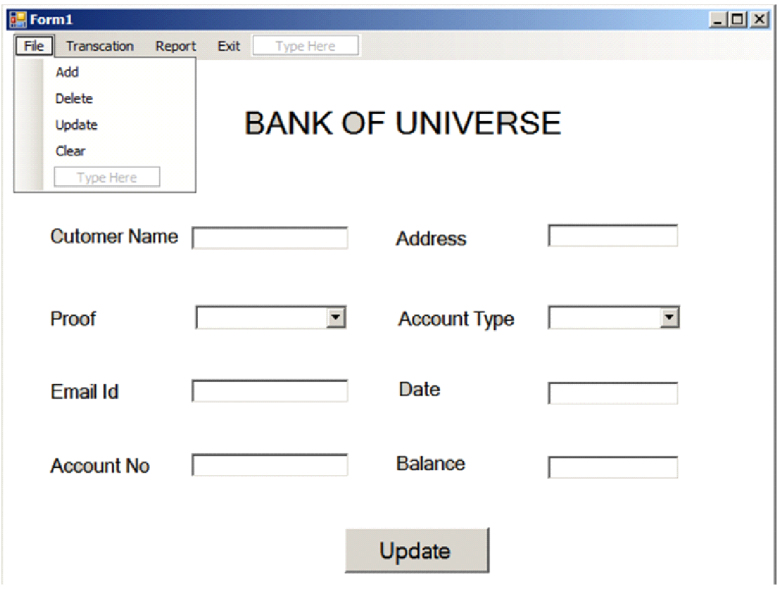
Table Name : **master**

Field Name	Type	Description
accno	Currency	Account Number
cname	Text	Name of the Customer
address	Text	Address of the customer
phno	Currency	Phone Number
email	Text	Customer Email ID
acctype	Text	Account Type
bal	Currency	Account Balance
opdate	Date/Time	Account Opening Date

Table Name : **trans**

Field Name	Type	Description
accno	Currency	Account Number
cname	Text	Name of the Customer
address	Text	Address of the customer
transtype	Text	Transaction Type
tamt	Currency	Transaction Amount
tdate	Date/Time	Transaction Date

Form design



Coding

```
Imports ADODB
Public Class Form1
   Dim con As New ADODB.Connection
   Dim rs As New ADODB.Recordset
   Dim cmd As New ADODB.Command
   Dim flag As Integer = 1
   Dim no As Double
   Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As
          System.EventArgs) Handles MyBase.Load
con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data Source=C:\Users\dell\Desktop\
          rdbms\bank\bank\bank.accdb")
      MsgBox(" DB Connected")
      comboacctype.Items.Add("Saving")
      comboacctype.Items.Add("Current")
      comboproof.Items.Add("Aadhar Card")
      comboproof.Items.Add("Voter ID")
      comboproof.Items.Add("PAN Card")
      comboproof.Items.Add("Driving Lincense")
      btupdate.Visible = False
      tdate.Text = Date.Now
      tcustname.Select()
   End Sub

   Private Sub AddToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
          System.EventArgs) Handles AddToolStripMenuItem.Click
      btupdate.Visible = False
      taddress.Enabled = True
      tdate.Enabled = True
      taccno.Enabled = True
```

```
        cmd.ActiveConnection = con
cmd.CommandText = "insert into master values(@accno,@cname,
            @address,@phno,@email,@acctype,@bal,@opdate)"
        cmd.Parameters.Item(0).Value = taccno.Text
        cmd.Parameters.Item(1).Value = tcustname.Text
        cmd.Parameters.Item(2).Value = taddress.Text
        cmd.Parameters.Item(3).Value = comboproof.SelectedItem
        cmd.Parameters.Item(4).Value = temail.Text
        cmd.Parameters.Item(5).Value = comboacctype.SelectedItem
        cmd.Parameters.Item(6).Value = tbal.Text
        cmd.Parameters.Item(7).Value = tdate.Text
        cmd.Execute()
        MsgBox(" Record Added ")
    End Sub

    Private Sub DeleteToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
            As System.EventArgs) Handles DeleteToolStripMenuItem.Click
        btupdate.Visible = False
        taddress.Enabled = True
        tdate.Enabled = True
        taccno.Enabled = True
        disp()
        If flag = 0 Then
            cmd.ActiveConnection = con
            cmd.CommandText = "delete * from master where accno=@accno"
            cmd.Parameters.Item(0).Value = no
            rs = cmd.Execute()
            MsgBox("Record   Deleted")
        Else
            MsgBox("Record Not  Deleted")
```

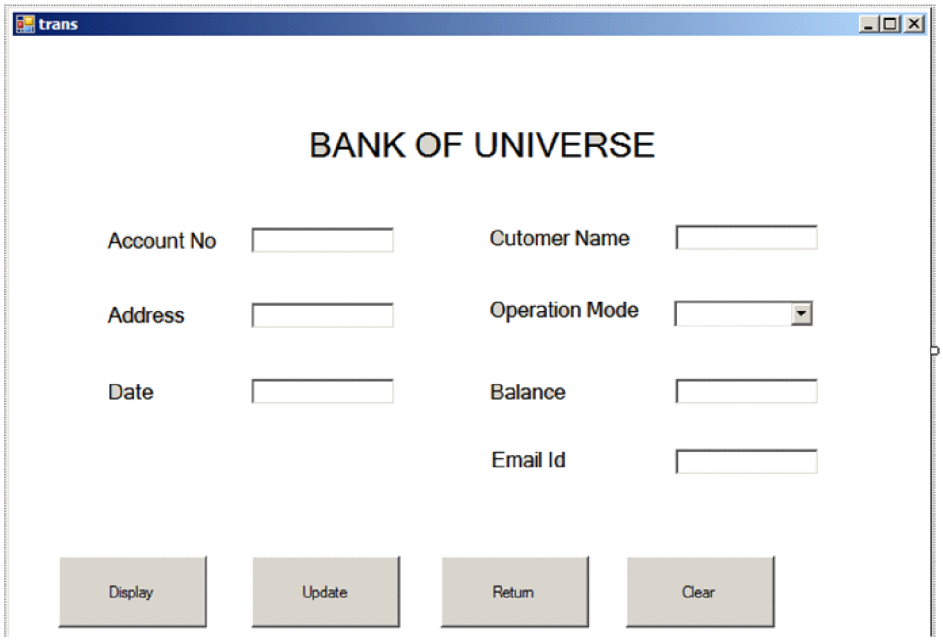
```
    End If
End Sub
Public Function disp()
    cmd.ActiveConnection = con
    no = Val(InputBox("Enter the Account No"))
    cmd.CommandText = "select * from master where accno=@accno"
    cmd.Parameters.Item(0).Value = no
    rs = cmd.Execute()
    Do Until rs.EOF
        taccno.Text = rs.Fields(0).Value
        tcustname.Text = rs.Fields(1).Value
        taddress.Text = rs.Fields(2).Value
        comboproof.SelectedItem = rs.Fields(3).Value
        temail.Text = rs.Fields(4).Value
        comboacctype.SelectedItem = rs.Fields(5).Value
        tbal.Text = rs.Fields(6).Value
        tdate.Text = rs.Fields(7).Value
        rs.MoveNext()
        flag = 0
    Loop
    If flag = 1 Then
        MsgBox(" Record Not Found")
        btupdate.Visible = False
    End If
End Function
Public Function clr()
    tcustname.Text = ""
    taccno.Text = ""
    taddress.Text = ""
```

```
    temail.Text = “”
    tbal.Text = “”
    tdate.Text = “”
End Function

Private Sub EditToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles EditToolStripMenuItem.Click
    disp()
    btupdate.Visible = True
    taddress.Enabled = False
    tdate.Enabled = False
    taccno.Enabled = False
End Sub

Private Sub btupdate_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btupdate.Click
    cmd.ActiveConnection = con
    cmd.CommandText = “update master set
        cname=?,proof=?,email=?,acctype=?,bal=? where accno=?”
    cmd.Parameters.Item(0).Value = tcustname.Text
    cmd.Parameters.Item(1).Value = comboproof.SelectedItem
    cmd.Parameters.Item(3).Value = comboacctype.SelectedItem
    cmd.Parameters.Item(2).Value = temail.Text
    cmd.Parameters.Item(4).Value = Val(tbal.Text)
    cmd.Parameters.Item(5).Value = Val(taccno.Text)
    cmd.Execute()
    MsgBox(“ record Updated”)
    btupdate.Visible = False
End Sub
```

```
Private Sub UpdateToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles UpdateToolStripMenuItem.Click
    btupdate.Visible = False
    clr()
End Sub

Private Sub TranscationToolStripMenuItem_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles TranscationToolStripMenuItem.Click
    Me.Hide()
    trans.Show()
End Sub

Private Sub ReportToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles ReportToolStripMenuItem.Click
End Sub

Private Sub AccountsReportToolStripMenuItem_Click(ByVal sender As
        System.Object, ByVal e As System.EventArgs) Handles
        AccountsReportToolStripMenuItem.Click
    Me.Hide()
    Report.Show()
    Report.Label2.Text = “Account Holder Report”
    Report.ReportViewer1.Show()
    Report.ReportViewer2.Hide()
End Sub

Private Sub TranscationToolStripMenuItem1_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles TranscationToolStripMenuItem1.Click
    Me.Hide()
    Report.Show()
```

```
        Report.Label2.Text = “Transaction Report”
        Report.ReportViewer2.Show()
        Report.ReportViewer1.Hide()
    End Sub

    Private Sub ExitToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles ExitToolStripMenuItem.Click
        End
    End Sub

    Private Sub temail_LostFocus(ByVal sender As Object, ByVal e As
            System.EventArgs) Handles temail.LostFocus
    End Sub

    Private Sub tdate_LostFocus(ByVal sender As Object, ByVal e As System.EventArgs)
            Handles tdate.LostFocus
        cmd.ActiveConnection = con
        cmd.CommandText = “select max(accno) from master”
        rs = cmd.Execute()
        taccno.Text = Val(rs.Fields(0).Value) + 1
        MsgBox(“ Ur Account Number Generated”)
        tbal.Text = 500
    End Sub
End Class
```

Form2 design



Coding

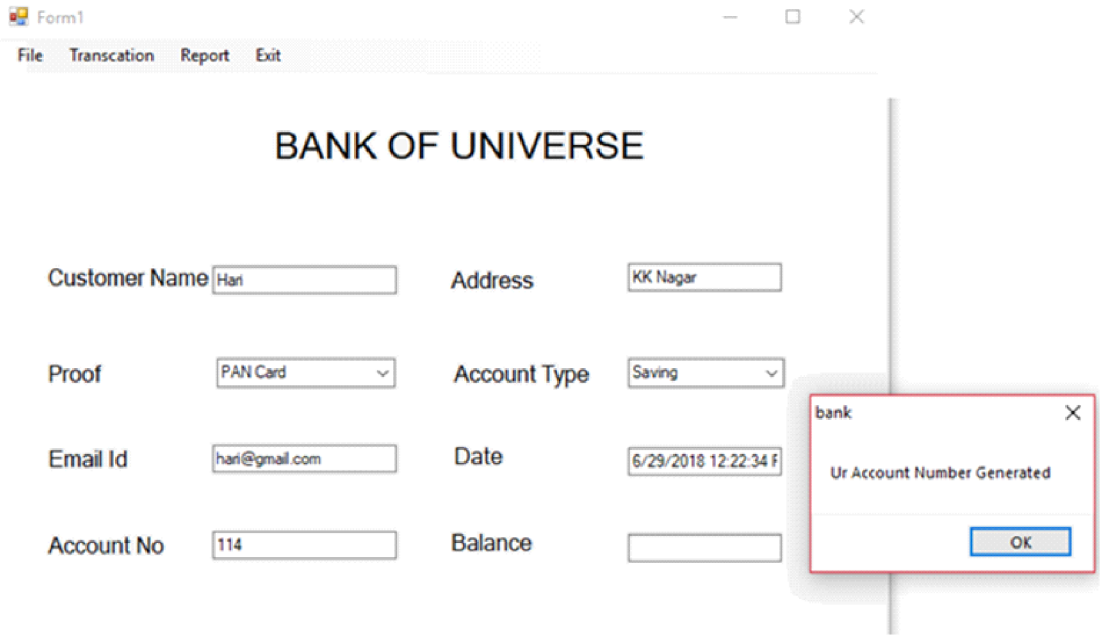
```
Public Class trans
  Dim con As New ADODB.Connection
  Dim rs As New ADODB.Recordset
  Dim cmd As New ADODB.Command
  Dim flag As Integer = 1
  Dim no As Double
  Private Sub trans_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles MyBase.Load
    combmode.Items.Add("Withdraw")
    combmode.Items.Add("Deposit")
    con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\bank\bank\bank.accdb")
    tdate.Text = Date.Now
  End Sub
```

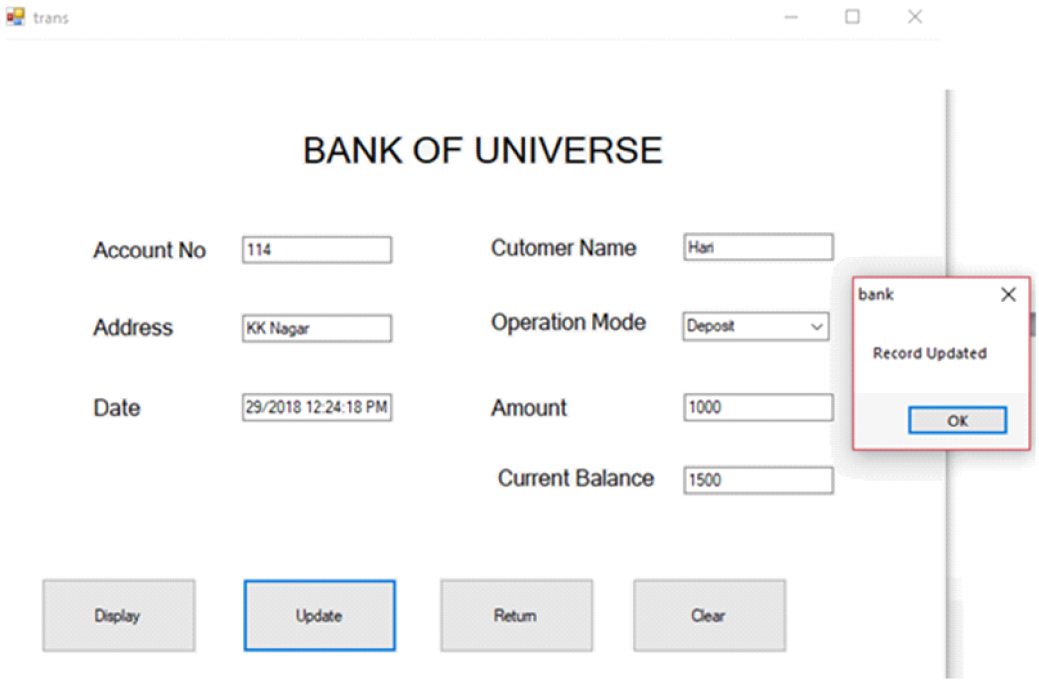
```
Private Sub btDisplay_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btDisplay.Click

   no = Val(InputBox("Enter the Account No"))
    disp()
End Sub
Public Function disp()
   cmd.ActiveConnection = con
    cmd.CommandText = "select * from master where accno=@accno"
   cmd.Parameters.Item(0).Value = no
    rs = cmd.Execute()
   Do Until rs.EOF
      taccno.Text = rs.Fields(0).Value
      tcustname.Text = rs.Fields(1).Value
      taddress.Text = rs.Fields(2).Value
      temail.Text = rs.Fields(4).Value
      tbal.Text = rs.Fields(6).Value
      rs.MoveNext()
      flag = 0
   Loop
   If flag = 1 Then
      MsgBox(" record Not Found")
   End If
End Function

Private Sub Btupdate_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles Btupdate.Click
   cmd.ActiveConnection = con
   cmd.CommandText = "update master set bal=? where accno=?"
   cmd.Parameters.Item(0).Value = temail.Text
```

```
    cmd.Parameters.Item(1).Value = taccno.Text
    cmd.Execute()
    cmd.CommandText = "insert into trans
        (accno,cname,address,transtype,tamt,tdate) values
        (@accno,@cname,@address,@transtype,@tamt,tdate)"
    cmd.Parameters.Item(0).Value = taccno.Text
    cmd.Parameters.Item(1).Value = tcustname.Text
    cmd.Parameters.Item(2).Value = taddress.Text
    cmd.Parameters.Item(3).Value = combmode.SelectedItem
    cmd.Parameters.Item(4).Value = tbal.Text
    cmd.Parameters.Item(5).Value = tdate.Text
    cmd.Execute()
    MsgBox(" Record Updated")
End Sub

Private Sub combmode_SelectedIndexChanged(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles combmode.SelectedIndexChanged
    Label7.Text = " Current Balance "
    Label6.Text = "Amount"
    temail.Text = tbal.Text
    tbal.Text = 0
End Sub

Private Sub tbal_LostFocus(ByVal sender As Object, ByVal e As System.EventArgs)
        Handles tbal.LostFocus
    If combmode.SelectedItem = "Deposit" Then
      temail.Text = Val(temail.Text) + Val(tbal.Text)
    Else
      If Val(temail.Text) < Val(tbal.Text) Then
          MsgBox(" Amount Not Suffient")
       Else
```

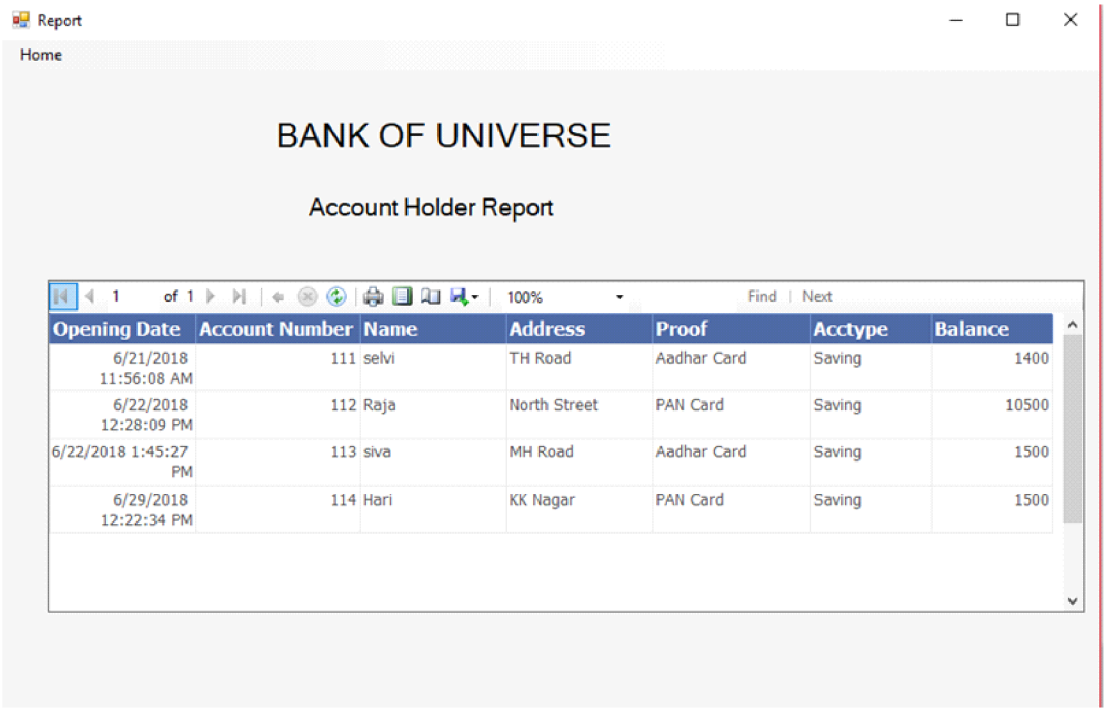
```
            temail.Text = Val(temail.Text) - Val(tbal.Text)
        End If
    End If
End Sub

Private Sub btclear_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btclear.Click
    taccno.Text = “”
    tcustname.Text = “”
    taddress.Text = “”
    temail.Text = “”
    tdate.Text = “”
    tbal.Text = “”
End Sub

Private Sub btreturn_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btreturn.Click
    Me.Hide()
    Form1.Show()
End Sub

Private Sub taccno_LostFocus(ByVal sender As Object, ByVal e As
        System.EventArgs) Handles taccno.LostFocus
    no = Val(taccno.Text)
    disp()
End Sub
End Class
```

Output

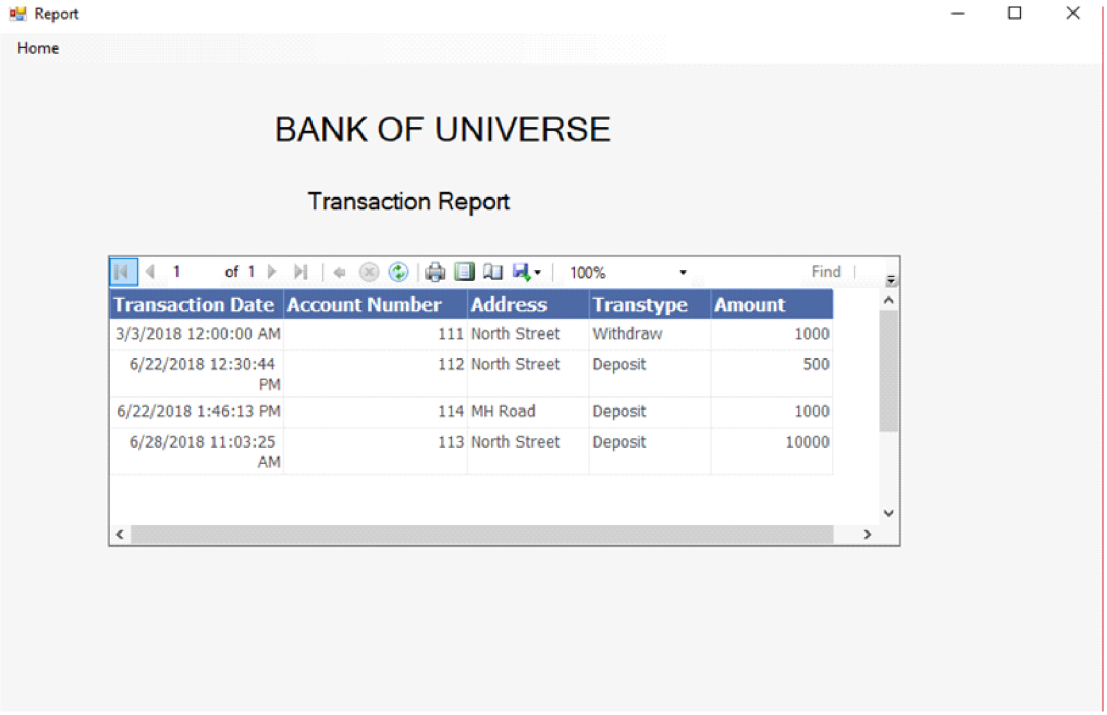

Form1
File
Transcation
Report
Exit
BANK OF UNIVERSE
Customer Name
Hari
Address
KK Nagar
Proof
PAN Card
Account Type
Saving
Email Id
hari@gmail.com
Date
6/29/2018 12:22:34 F
Account No
114
Balance
bank
Ur Account Number Generated
OK


trans
BANK OF UNIVERSE
Account No
114
Cutomer Name
Hari
Address
KK Nagar
Operation Mode
Deposit
Date
29/2018 12:24:18 PM
Amount
1000
Current Balance
1500
bank
Record Updated
OK
Display
Update
Return
Clear

Report



Opening Date	Account Number	Name	Address	Proof	Acctype	Balance
6/21/2018 11:56:08 AM	111	selvi	TH Road	Aadhar Card	Saving	1400
6/22/2018 12:28:09 PM	112	Raja	North Street	PAN Card	Saving	10500
6/22/2018 1:45:27 PM	113	siva	MH Road	Aadhar Card	Saving	1500
6/29/2018 12:22:34 PM	114	Hari	KK Nagar	PAN Card	Saving	1500



Transaction Date	Account Number	Address	Transtype	Amount
3/3/2018 12:00:00 AM	111	North Street	Withdraw	1000
6/22/2018 12:30:44 PM	112	North Street	Deposit	500
6/22/2018 1:46:13 PM	114	MH Road	Deposit	1000
6/28/2018 11:03:25 AM	113	North Street	Deposit	10000

5. Aim: to crate master and transaction table for maintaining the inventory system and generate the corresponding report

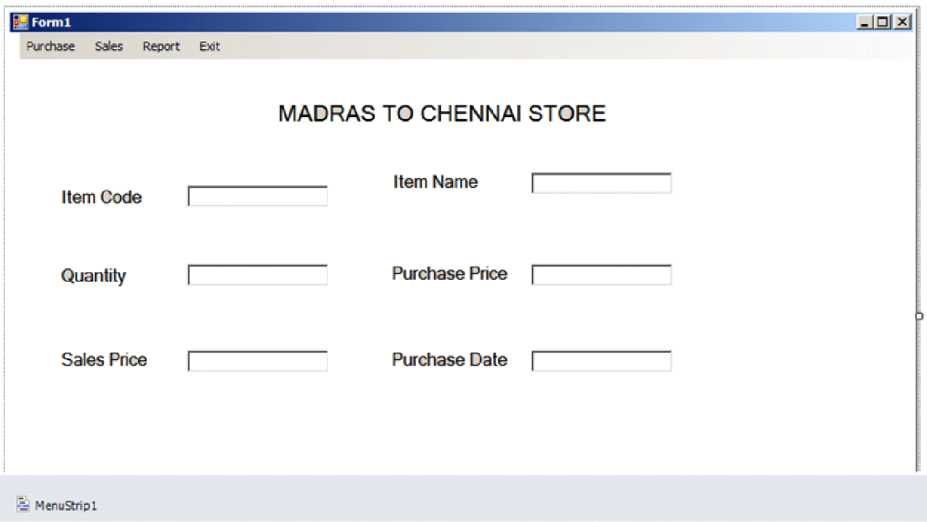
Table Name : master

Field Name	Type	Description
Itemcode	Currency	Item code
Itemname	Text	Name of the item
quantity	Currency	Quantity
pprice	Currency	Purchase Price
sprice	Currency	Sales Price
pdate	Date/Time	Purchase Date

Table Name : trans

Field Name	Type	Description
invno	Currency	Inventory Number
invdate	Date/Time	Inventory Date
custname	Text	Customer Name
address	Text	Address of the customer
phoneno	Currency	Phoneno
itemcode	Currency	Item Number
itemname	Text	Name of the item
unitprice	Currency	Unit
qty	Currency	No of quantity
amount	Currency	Amount
tax	Currency	Tax
totamt	Currency	Total Amount

Form Design



Coding

```
Imports ADODB
Public Class Form1
  Dim con As New ADODB.Connection
  Dim rs As New ADODB.Recordset
  Dim cmd As New ADODB.Command
  Dim flag As Integer = 1
  Dim no As String

  Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles MyBase.Load
    con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\inventory\inventory\inventory.accdb")
    MsgBox(" Connected")
  End Sub

  Private Sub AddToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles AddToolStripMenuItem.Click
    cmd.ActiveConnection = con
    cmd.CommandText = "insert into master
        values(@itemcode,@itemname,@quantity,@pprice,@sprice,@pdate)"
    cmd.Parameters.Item(0).Value = ticode.Text
    cmd.Parameters.Item(1).Value = tiname.Text
    cmd.Parameters.Item(2).Value = tquty.Text
    cmd.Parameters.Item(3).Value = tpprice.Text
    cmd.Parameters.Item(4).Value = tsprice.Text
    cmd.Parameters.Item(5).Value = tpdate.Text
    cmd.Execute()
    MsgBox("Records Added Successfully")
    clr()
  End Sub
```

```
Public Function clr()
    ticode.Text = “”
    tiname.Text = “”
    tquty.Text = “”
    tpprice.Text = “”
    tsprice.Text = “”
    tpdate.Text = “”
End Function

Private Sub ViewToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles ViewToolStripMenuItem.Click
    disp()
End Sub
Public Function disp()
    cmd.ActiveConnection = con
    no = InputBox(“Enter the Itemname”)
    cmd.CommandText = “select * from master where itemname=@itemname”
    cmd.Parameters.Item(0).Value = no
    rs = cmd.Execute()
    Do Until rs.EOF
        ticode.Text = rs.Fields.Item(0).Value
        tiname.Text = rs.Fields.Item(1).Value
        tquty.Text = rs.Fields.Item(2).Value
        tpprice.Text = rs.Fields.Item(3).Value
        tsprice.Text = rs.Fields.Item(4).Value
        tpdate.Text = rs.Fields.Item(5).Value
        flag = 0
        rs.MoveNext()
    Loop
    If flag = 1 Then
        MsgBox(“ Record Not Found”)
```

```
        End If
    End Function

    Private Sub DeleteToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
            As System.EventArgs) Handles DeleteToolStripMenuItem.Click
        disp()
        cmd.ActiveConnection = con
        cmd.CommandText = “delete * from master where itemname=@itemname”
        cmd.Parameters.Item(0).Value = no
        cmd.Execute()
        MsgBox(“ Record Deleted Successfully”)
        clr()
    End Sub

    Private Sub SalesToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
            As System.EventArgs) Handles SalesToolStripMenuItem.Click
        Me.Hide()
        Sales.Show()
    End Sub

    Private Sub ReportToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
            As System.EventArgs) Handles ReportToolStripMenuItem.Click
        Me.Hide()
        report.Show()
    End Sub

    Private Sub ExitToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles ExitToolStripMenuItem.Click
        End
    End Sub
End Class
```

6. Aim: To crete product and order tables and generate report for purchase order placed

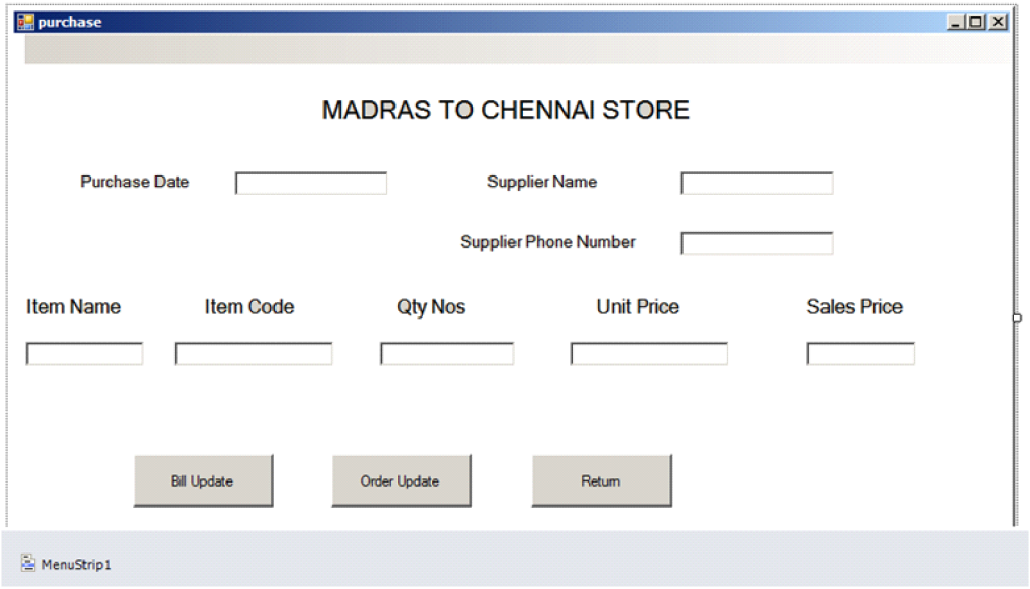
Table Name : product

Field Name	Type	Description
pid	Currency	Purchase ID
pname	Text	Purchase Name
price	Currency	Price
soh	Currency	Stock on hand
pdate	Date/Time	Purchase Date

Table Name : orderdetails

Field Name	Type	Description
bname	Text	Buyer Name
organi	Text	Organisation
add	Text	Address
ordno	Currency	Order number
doord	Date/Time	Date of Order
tpid	Currency	Product ID
tpdesc	Text	Product Description
ordqty	Currency	Order Quantity
Unit	Currency	Unit Price
amount	Currency	Total Amount

Form design

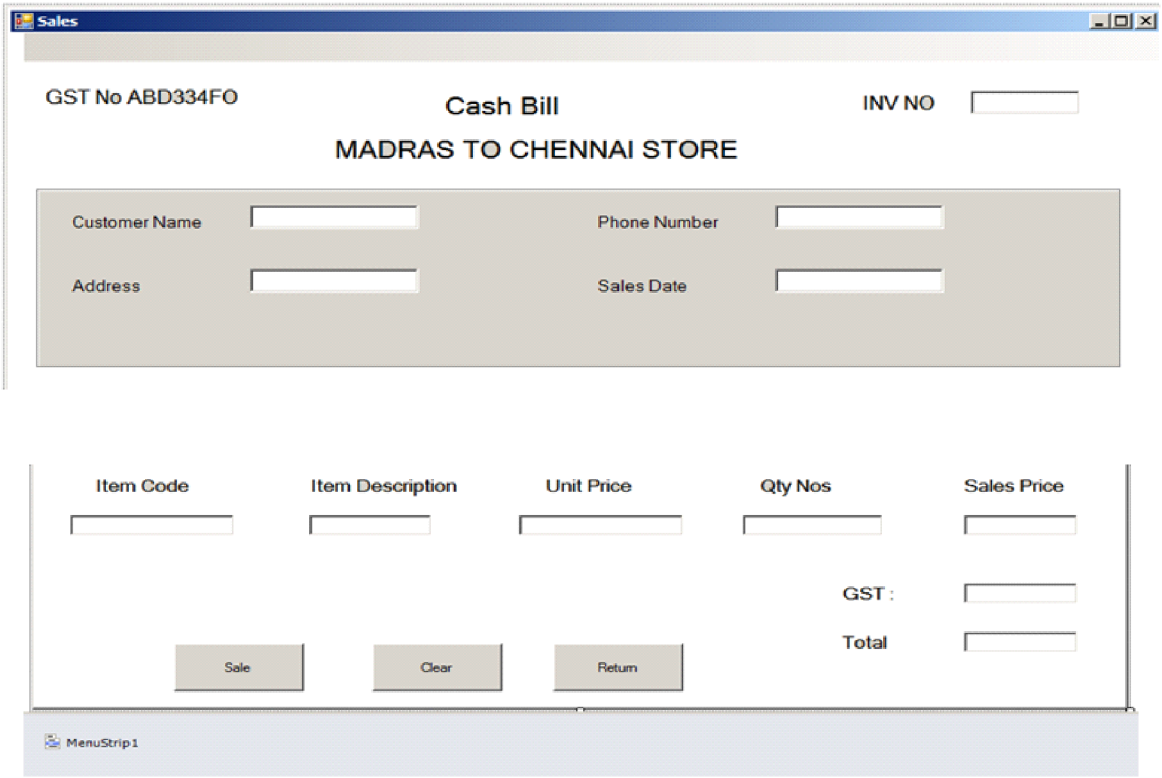


Coding

```
Public Class purchase
  Dim con As New ADODB.Connection
  Dim rs As New ADODB.Recordset
  Dim cmd As New ADODB.Command
  Dim flag As Integer = 1
  Dim no As String
  Private Sub Button2_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btorder.Click

  End Sub

  Private Sub purchase_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles MyBase.Load
   con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\inventory\inventory\inventory.accdb ")
  End Sub

  Private Sub btbill_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btbill.Click
   cmd.ActiveConnection = con
   cmd.CommandText = "insert into master
        values(@itemcode,@itemname,@pprice,@sprice,@pdate)"
   cmd.Parameters.Item(0).Value = ticode.Text
   cmd.Parameters.Item(1).Value = tiname.Text
   '  cmd.Parameters.Item(2).Value = tpprice.Text
   cmd.Parameters.Item(3).Value = tsprice.Text
   '' cmd.Parameters.Item(4).Value = tpdate.Text
   ' cmd.Execute()
   MsgBox("Records Added Successfully")
```

```
        'clr()
    End Sub
End Class
```

Sales form design



Sales coding

```
PublicClassSales
Dim con AsNew ADODB.Connection
Dim rs AsNew ADODB.Recordset
Dim cmd AsNew ADODB.Command
Dim flag AsInteger = 1
Dim no AsString
PrivateSub Sales_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) HandlesMyBase.Load
    con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
```

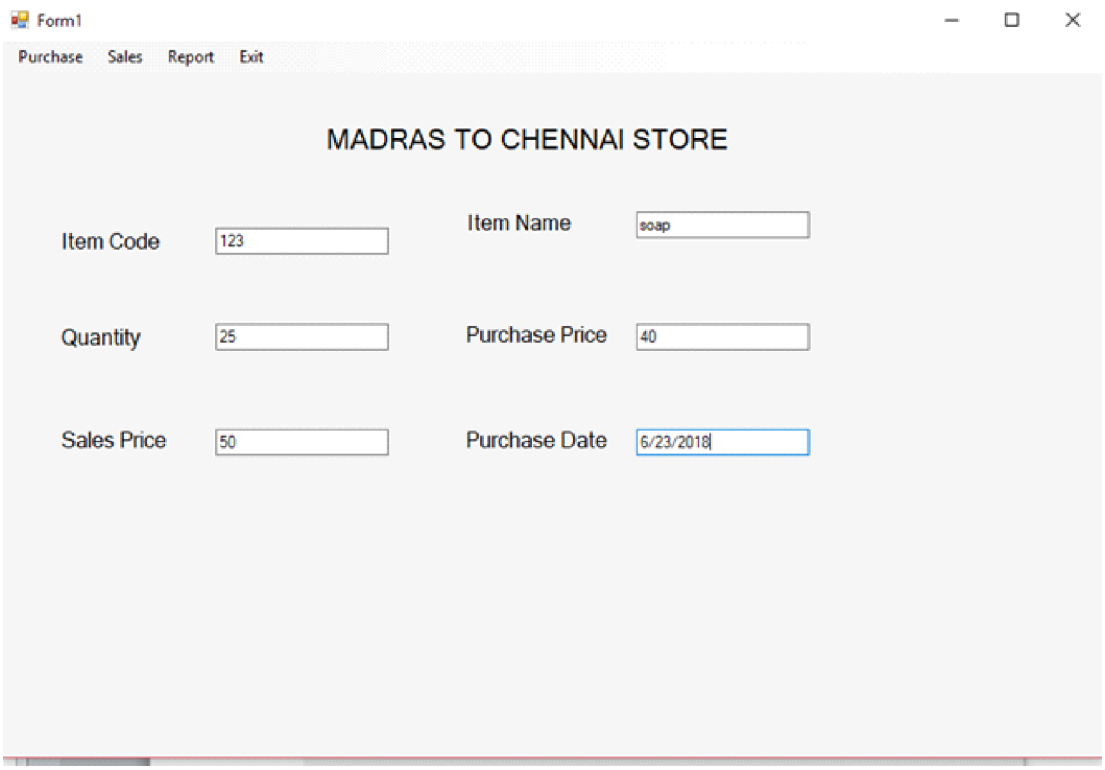
```
            Source=C:\Users\dell\Desktop\rdbms\inventory\inventory\inventory.accdb")
EndSub

PrivateSub btsale_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles btsale.Click
        cmd.ActiveConnection = con
If flag = 0 Then
            cmd.CommandText = "insert into trans
              values(@invno,@invdate,@custname,@address,@phoneno,@itemcode,@
              itemname,@unitprice,@qty,@amount,@tax,@totamt)"
            cmd.Parameters.Item(0).Value = tinvno.Text
            cmd.Parameters.Item(1).Value = tsdate.Text
            cmd.Parameters.Item(2).Value = tcname.Text
            cmd.Parameters.Item(3).Value = taddress.Text
            cmd.Parameters.Item(4).Value = tphno.Text
            cmd.Parameters.Item(5).Value = ticode.Text
            cmd.Parameters.Item(6).Value = tiname.Text
            cmd.Parameters.Item(7).Value = tunit.Text
            cmd.Parameters.Item(8).Value = tqty.Text
            cmd.Parameters.Item(9).Value = tsprice.Text
            cmd.Parameters.Item(10).Value = tgst.Text
            cmd.Parameters.Item(11).Value = ttot.Text
            cmd.Execute()
            MsgBox(" Sales Successfully")
            clr()
EndIf
EndSub
PublicFunction clr()
        tinvno.Text = ""
        tsdate.Text = ""
```

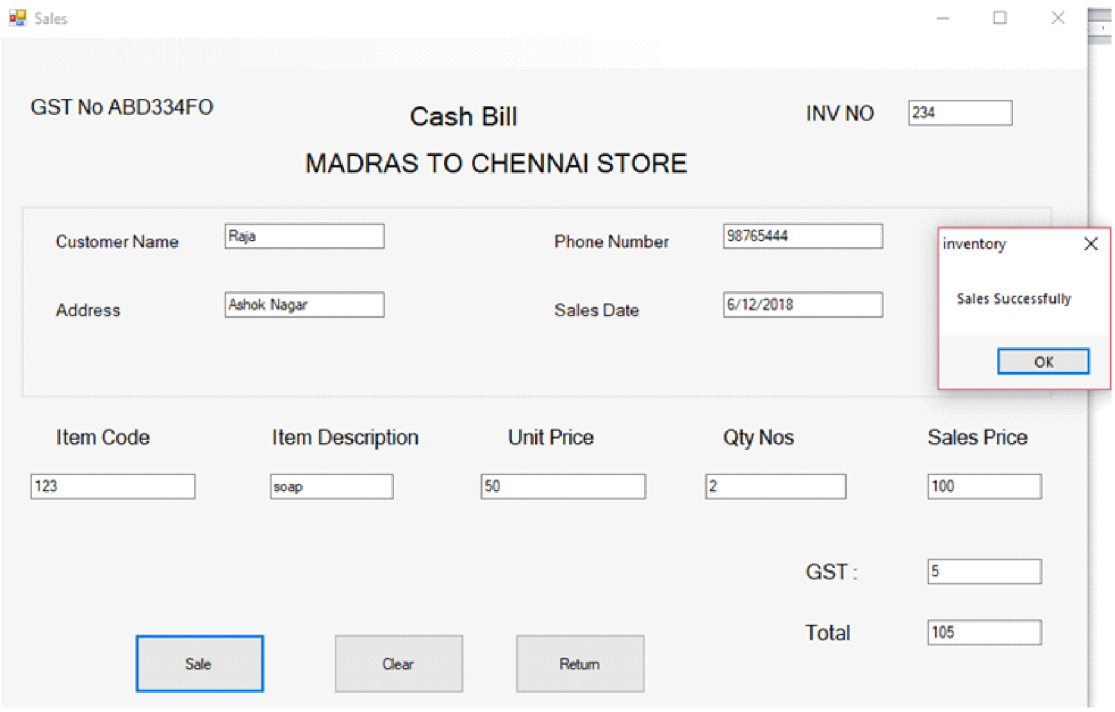
```
        tcname.Text = “”
        taddress.Text = “”
        tphno.Text = “”
        ticode.Text = “”
        tiname.Text = “”
        tunit.Text = “”
        tqty.Text = “”
        tsprice.Text = “”
        tgst.Text = “”
        ttot.Text = “”
EndFunction

PrivateSub btclear_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles btclear.Click
        clr()
EndSub

PrivateSub btreturn_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles btreturn.Click
Me.Hide()
Form1.Show()
EndSub

PrivateSub tqty_LostFocus(ByVal sender AsObject, ByVal e As System.EventArgs)
            Handles tqty.LostFocus
        cmd.ActiveConnection = con
        cmd.CommandText = “select quantity from master where itemcode=@itemcode “
        cmd.Parameters.Item(0).Value = ticode.Text
        rs = cmd.Execute()
DoUntil rs.EOF
```

```
If Val(tqty.Text) < Val(rs.Fields.Item(0).Value) Then
            cmd.CommandText = "update master set quantity=? where itemcode=?"
           cmd.Parameters.Item(0).Value = Val(rs.Fields.Item(0).Value) - Val(tqty.Text)
            cmd.Parameters.Item(1).Value = ticode.Text
             cmd.Execute()
           tsprice.Text = Val(tunit.Text) * Val(tqty.Text)
            tgst.Text = (Val(tsprice.Text) * 5) / 100
           ttot.Text = Val(tsprice.Text) + Val(tgst.Text)
            flag = 0
Else
            MsgBox("Stock not available")
           MsgBox("Stock on Hand "& Val(rs.Fields.Item(0).Value))

EndIf
         rs.MoveNext()
Loop
EndSub

PrivateSub ticode_LostFocus(ByVal sender AsObject, ByVal e As System.EventArgs)
           Handles ticode.LostFocus
      cmd.ActiveConnection = con
       cmd.CommandText = "select itemname,sprice from master where
           itemcode=@itemcode "
      cmd.Parameters.Item(0).Value = ticode.Text
       rs = cmd.Execute()
DoUntil rs.EOF
         tiname.Text = rs.Fields(0).Value
         tunit.Text = rs.Fields(1).Value
          flag = 0
         rs.MoveNext()
```

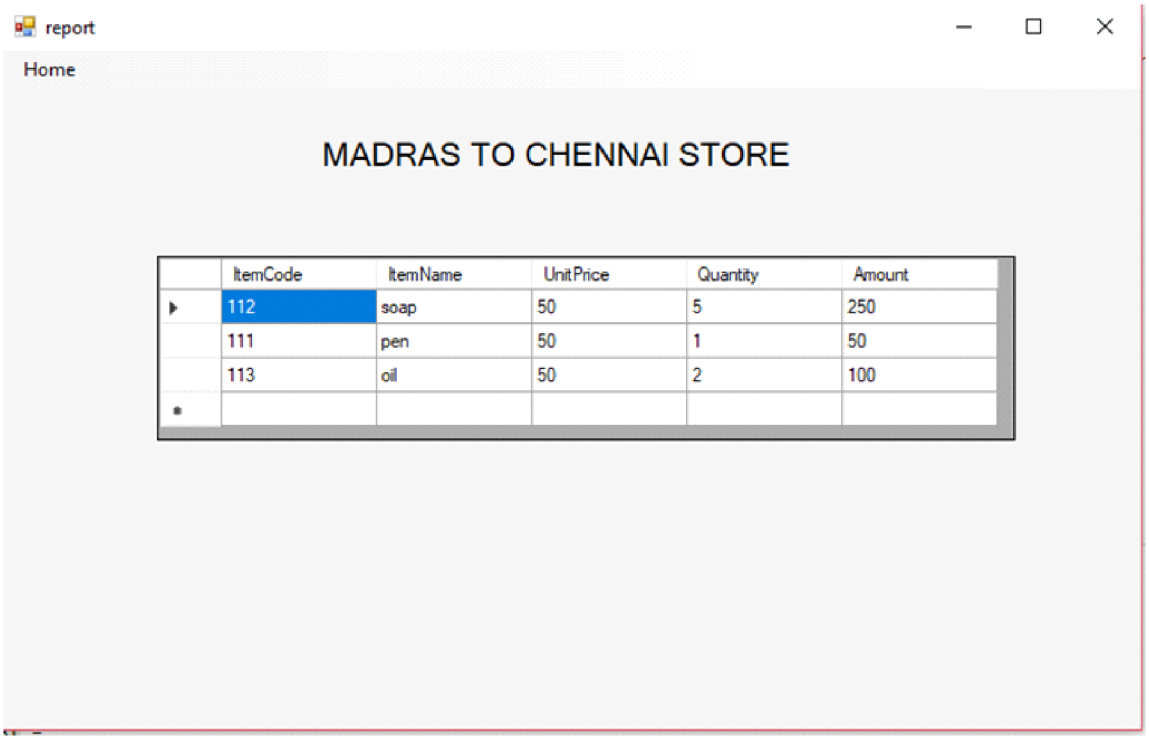
```
Loop
If flag = 1 Then
        MsgBox(“ Invalid Item Code”)
EndIf
EndSub
EndClass
```

Output





Report



ItemCode	ItemName	UnitPrice	Quantity	Amount
112	soap	50	5	250
111	pen	50	1	50
113	oil	50	2	100

7. Aim : To create table for employee personal and salary details and generate report for payroll

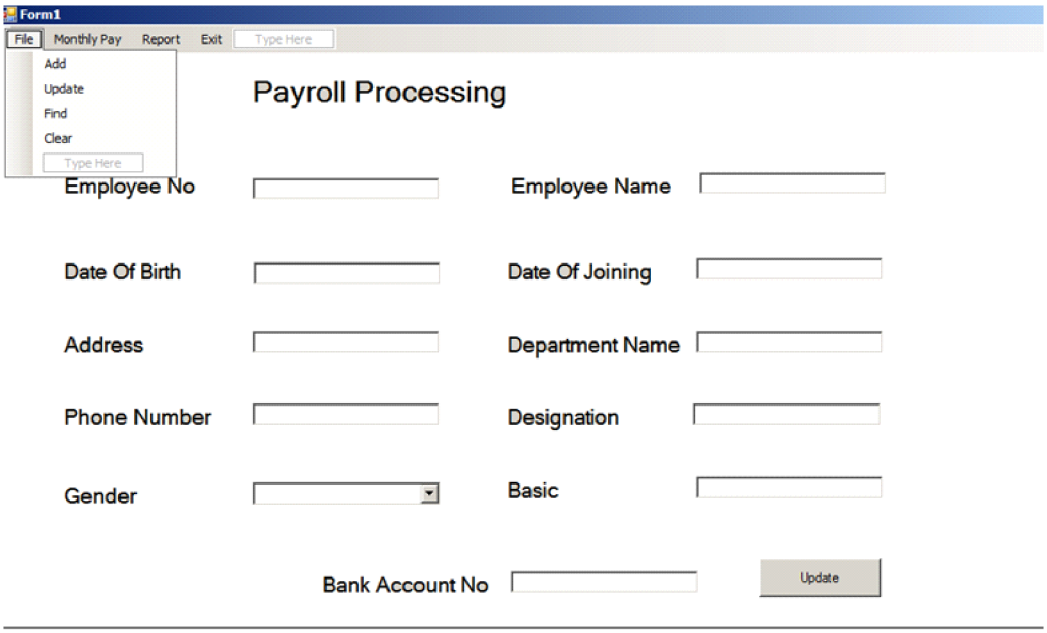
Table Name : emp

Field Name	Type	Description
empno	Currency	Employee Number
empname	Text	Employee Name
address	Text	Address of the employee
phone	Currency	Phone Number
desig	Text	Designation
department	Text	Name of the department
dob	Date/Time	Date of Birth
doj	Date/Time	Date of Joining
gender	Text	Gender
baccno	Curreny	Bank Account No
basic	Currency	Basic Salary

Table Name : pay

Field Name	Type	Description
empno	Currency	Employee Number
empname	Text	Employee Name
desig	Text	Designation
phno	Currency	Phone Number
Basic	Currency	Basic Salary
Hra	Currency	HRA
Da	Currency	DA
Pf	Currency	PF
Gpay	Curreny	Gross Pay
Netpay	Currency	Netpay
Cmonth	Currency	Month of Pay bill

Form Design



Coding

```
Imports ADODB
Public Class combodesig
   Dim con As New ADODB.Connection
   Dim rs As New ADODB.Recordset
   Dim cmd As New ADODB.Command
   Dim flag As Integer = 1
   Dim no As Double
   Private Sub Form1_Load(ByVal sender As System.Object, ByVal e As
         System.EventArgs) Handles MyBase.Load
      con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
         Source=C:\Users\dell\Desktop\rdbms\payroll\payroll\payroll.accdb")
      MsgBox(" Connected")
      combosex.Items.Add("Male")
      combosex.Items.Add("Female")
```

```
    btupdate.Visible = False
    cmd.ActiveConnection = con
    cmd.CommandText = “select max(empno) from emp”
    rs = cmd.Execute
    tempno.Text = (rs.Fields(0).Value + 1)
End Sub

Private Sub AddToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles AddToolStripMenuItem.Click
    btupdate.Visible = False
    cmd.ActiveConnection = con
    cmd.CommandText = “insert into emp values (@empno, @empname, @address,
        @phone, @desig, @department, @dob, @doj, @gender, @baccno, @basic)”
    cmd.Parameters.Item(0).Value = tempno.Text
    cmd.Parameters.Item(1).Value = tempname.Text
    cmd.Parameters.Item(2).Value = taddress.Text
    cmd.Parameters.Item(3).Value = tpho.Text
    cmd.Parameters.Item(4).Value = tdesig.Text
    cmd.Parameters.Item(5).Value = tdept.Text
    cmd.Parameters.Item(6).Value = tdob.Text
    cmd.Parameters.Item(7).Value = tdoj.Text
    cmd.Parameters.Item(8).Value = combosex.SelectedItem
    cmd.Parameters.Item(9).Value = tbank.Text
    cmd.Parameters.Item(10).Value = tbasic.Text
    cmd.Execute()
    MsgBox(“ Records Added Successfully”)
End Sub
```

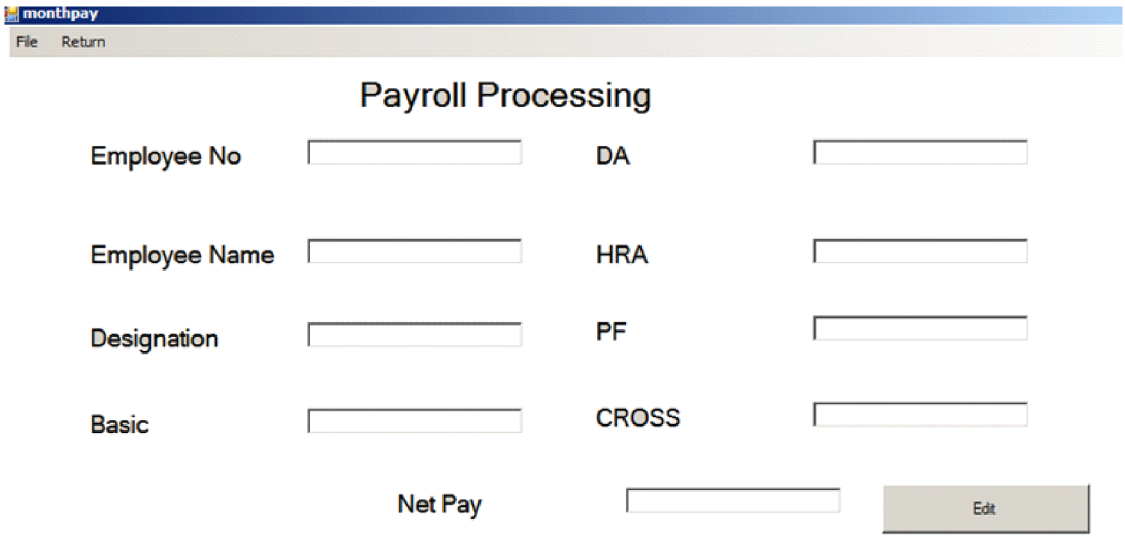
```
Private Sub ClearToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles ClearToolStripMenuItem.Click
    btupdate.Visible = False
    tempno.Text = “”
    tempname.Text = “”
    taddress.Text = “”
    tpho.Text = “”
    tdept.Text = “”
    tdob.Text = “”
    tdoj.Text = “”
    tbank.Text = “”
    tbasic.Text = “”
End Sub

Private Sub ExitToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles ExitToolStripMenuItem.Click
    End
End Sub

Private Sub FindToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles FindToolStripMenuItem.Click
    btupdate.Visible = False
    disp()
End Sub
Public Function disp()
    cmd.ActiveConnection = con
    no = Val(InputBox(“Enter the Employee No “))
    cmd.CommandText = “select  * from emp where empno=@empno”
    cmd.Parameters.Item(0).Value = no
    rs = cmd.Execute()
```

```
    Do Until rs.EOF
        tempno.Text = rs.Fields(0).Value
        tempname.Text = rs.Fields(1).Value
        taddress.Text = rs.Fields(2).Value
        tpho.Text = rs.Fields(3).Value
        tdesig.Text= rs.Fields(4).Value
        tdept.Text = rs.Fields(5).Value
        tdob.Text = rs.Fields(6).Value
        tdoj.Text = rs.Fields(7).Value
        combosex.SelectedItem = rs.Fields(8).Value
        tbank.Text = rs.Fields(9).Value
        tbasic.Text = rs.Fields(10).Value
        flag = 0
        rs.MoveNext()
    Loop
    If flag = 1 Then
        MsgBox(" Record Not Found")
    End If
End Function

Private Sub UpdateToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles UpdateToolStripMenuItem.Click
    disp()
    btupdate.Visible = True
End Sub

Private Sub FileToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles FileToolStripMenuItem.Click
End Sub
```

```
Private Sub btupdate_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btupdate.Click
    cmd.ActiveConnection = con
    cmd.CommandText = "update  emp set
        address=?,phone=?,desig=?,department=?,dob=?,doj=?,gender=?,baccno=?,basic=?
        where empno=?"
    cmd.Parameters.Item(0).Value = taddress.Text
    cmd.Parameters.Item(1).Value = tpho.Text
    cmd.Parameters.Item(2).Value = tdesig.Text
    cmd.Parameters.Item(3).Value = tdept.Text
    cmd.Parameters.Item(4).Value = tdob.Text
    cmd.Parameters.Item(5).Value = tdoj.Text
    cmd.Parameters.Item(6).Value = combosex.SelectedItem
    cmd.Parameters.Item(7).Value = tbank.Text
    cmd.Parameters.Item(8).Value = tbasic.Text
    cmd.Parameters.Item(9).Value = tempno.Text
    cmd.Execute()
    MsgBox(" Records Updated Successfully")
End Sub

Private Sub MonthlyPayToolStripMenuItem_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles MonthlyPayToolStripMenuItem.Click
    Me.Hide()
    monthpay.Show()
End Sub

Private Sub ReportToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles ReportToolStripMenuItem.Click
End Sub
```

```
Private Sub EmployeeReportToolStripMenuItem_Click(ByVal sender As
        System.Object, ByVal e As System.EventArgs) Handles
        EmployeeReportToolStripMenuItem.Click
    Me.Hide()
    Report.Show()
    Report.ReportViewer1.Show()
    Report.ReportViewer2.Hide()
End Sub

Private Sub PayReportToolStripMenuItem_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles PayReportToolStripMenuItem.Click
    Me.Hide()
    Report.Show()
    Report.ReportViewer1.Hide()
    Report.ReportViewer2.Show()
End Sub
End Class
```

Form design



Coding

```
Imports ADODB
Public Class monthpay
  Dim con As New ADODB.Connection
  Dim rs As New ADODB.Recordset
  Dim cmd1 As New ADODB.Command
  Dim flag As Integer = 1
  Dim no As Double

  Private Sub ReturnToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
        As System.EventArgs) Handles ReturnToolStripMenuItem.Click
    Me.Hide()
    combodesig.Show()
  End Sub

  Private Sub AddRecordToolStripMenuItem_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles AddRecordToolStripMenuItem.Click
    tempno.Enabled = True
    tempname.Enabled = True
    cmd1.ActiveConnection = con
    cmd1.CommandText = "insert into pay
        values(@Empno,@Empname,@desig,@basic,
        @hra,@da,@pf,@gpay,@netpay,@cmonth)"
    cmd1.Parameters.Item(0).Value = tempno.Text
    cmd1.Parameters.Item(1).Value = tempname.Text
    cmd1.Parameters.Item(2).Value = tdesig.Text
    cmd1.Parameters.Item(3).Value = tbasic.Text
    cmd1.Parameters.Item(4).Value = thra.Text
    cmd1.Parameters.Item(5).Value = tda.Text
    cmd1.Parameters.Item(6).Value = tpf.Text
```

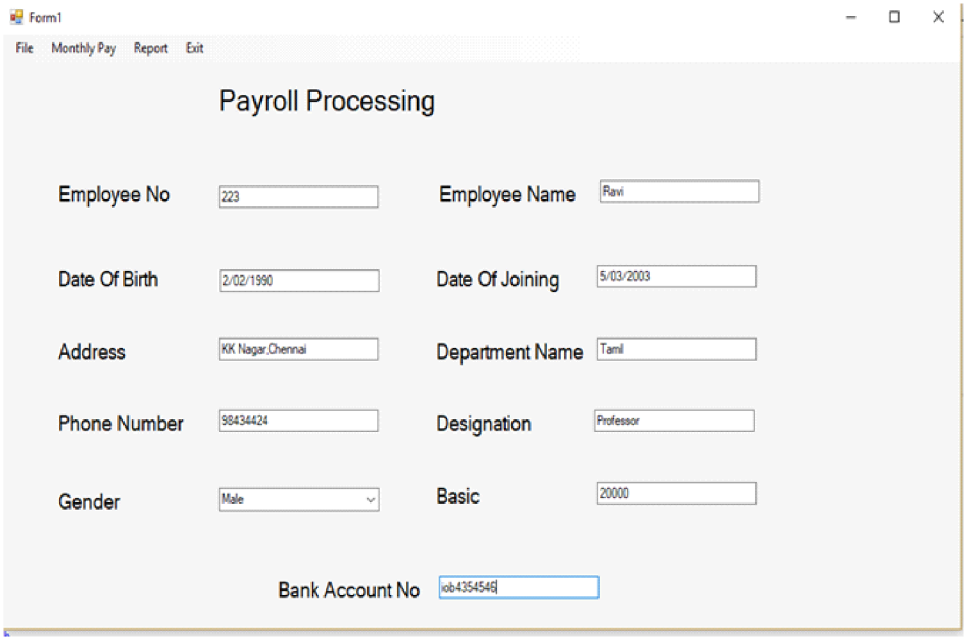
```
    cmd1.Parameters.Item(7).Value = tcross.Text
    cmd1.Parameters.Item(8).Value = tnet.Text
    cmd1.Parameters.Item(9).Value = Date.Now
    cmd1.Execute()
    MsgBox("Records Added Successfully ")
    btedit.Visible = False
    clr()
End Sub

Private Sub DeleteRecordToolStripMenuItem_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles DeleteRecordToolStripMenuItem.Click
    no = Val(InputBox("Enter the Employee No"))
    disp()
    tempno.Enabled = True
    tempname.Enabled = True
    If flag = 0 Then
        cmd1.CommandText = "delete * from pay where Empno=@empno"
        cmd1.Parameters.Item(0).Value = no
        cmd1.Execute()
        MsgBox(" Records Deleted Successfully")
        clr()
    End If
    btedit.Visible = False
End Sub

Private Sub EditRecordToolStripMenuItem_Click(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles EditRecordToolStripMenuItem.Click
    no = Val(InputBox("Enter the Employee No"))
    disp()
    tempno.Enabled = False
```

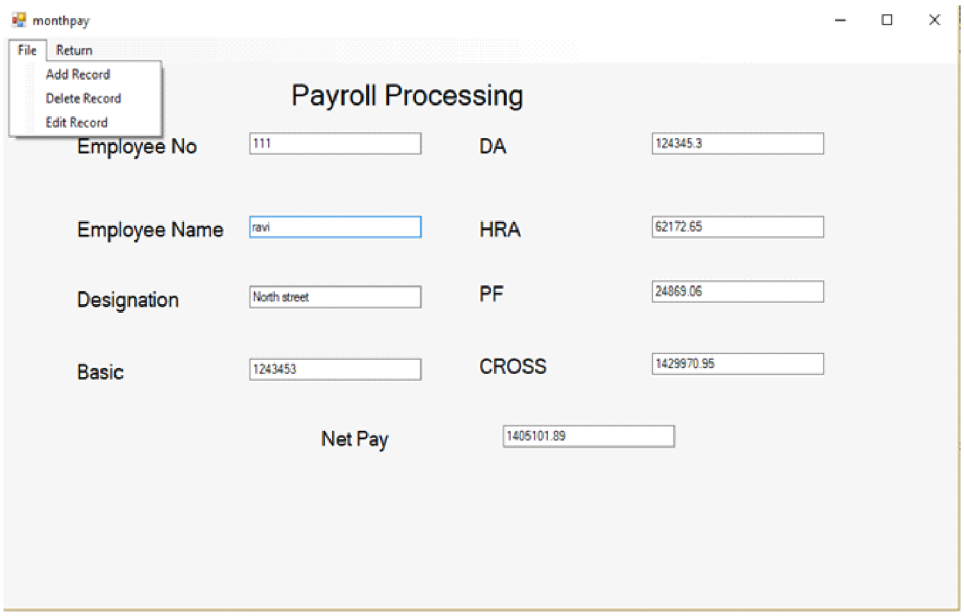
```
    tempname.Enabled = False
    btedit.Visible = True
End Sub
Public Function disp()
    cmd1.ActiveConnection = con
    cmd1.CommandText = “select * from pay where Empno=@empno”
    cmd1.Parameters.Item(0).Value = no
    rs = cmd1.Execute()
    Do Until rs.EOF
        tempno.Text = rs.Fields(0).Value
        tempname.Text = rs.Fields(1).Value
        tdesig.Text = rs.Fields(2).Value
        tbasic.Text = rs.Fields(3).Value
        thra.Text = rs.Fields(4).Value
        tda.Text = rs.Fields(5).Value
        tpf.Text = rs.Fields(6).Value
        tcross.Text = rs.Fields(7).Value
        tnet.Text = rs.Fields(8).Value
        rs.MoveNext()
        flag = 0
    Loop
    If flag = 1 Then
        MsgBox(“ Record Not Found”)
    End If
End Function

Private Sub btedit_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btedit.Click
    cmd1.ActiveConnection = con
    cmd1.CommandText = “update pay set
        desig=?,basic=?,hra=?,da=?,pf=?,gpay=?,netpay=? where empno=?”
```

```
    cmd1.Parameters.Item(0).Value = tdesig.Text
    cmd1.Parameters.Item(1).Value = tbasic.Text
    cmd1.Parameters.Item(2).Value = thra.Text
    cmd1.Parameters.Item(3).Value = tda.Text
    cmd1.Parameters.Item(4).Value = tpf.Text
    cmd1.Parameters.Item(5).Value = tcross.Text
    cmd1.Parameters.Item(6).Value = tnet.Text
    cmd1.Parameters.Item(7).Value = tempno.Text
    cmd1.Execute()
    MsgBox(" Records Edited Successfully")
    btedit.Visible = False
End Sub

Private Sub monthpay_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles MyBase.Load
    con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\payroll\payroll\payroll.accdb")
    tempno.Enabled = True
    tempname.Enabled = True
    btedit.Visible = False
    tempname.Select()
End Sub
Public Function clr()
    tempname.Text = ""
    tempno.Text = ""
    tdesig.Text = ""
    tbasic.Text = ""
    tda.Text = ""
    thra.Text = ""
    tpf.Text = ""
```

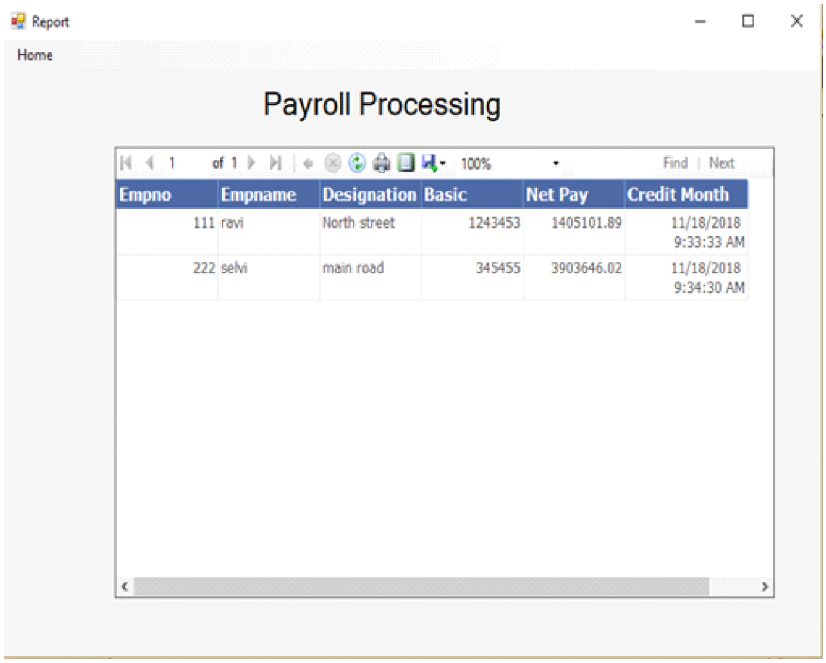
```
        tcross.Text = “”
        tnet.Text = “”
    End Function

    Private Sub tempno_LostFocus(ByVal sender As Object, ByVal e As
            System.EventArgs) Handles tempno.LostFocus
        cmd1.ActiveConnection = con
        cmd1.CommandText = “select * from emp where Empno=@empno”
        cmd1.Parameters.Item(0).Value = tempno.Text
        rs = cmd1.Execute()
        Do Until rs.EOF
            tempno.Text = rs.Fields(0).Value
            tempname.Text = rs.Fields(1).Value
            tdesig.Text = rs.Fields(2).Value
            tbasic.Text = rs.Fields(3).Value
            tda.Text = Val(tbasic.Text) * 0.1
            thra.Text = Val(tbasic.Text) * 0.05
            tpf.Text = Val(tbasic.Text) * 0.02
            tcross.Text = Val(tbasic.Text) + Val(tda.Text) + Val(thra.Text)
            tnet.Text = Val(tbasic.Text) + Val(tda.Text) + Val(thra.Text) - Val(tpf.Text)
            tempno.Enabled = True
            tempname.Enabled = True
            rs.MoveNext()
            flag = 0
        Loop
        If flag = 1 Then
            MsgBox(“ Record Not Found”)
        End If
    End Sub
End Class
```

Output


Form1
File
Monthly Pay
Report
Exit
Payroll Processing
Employee No
223
Employee Name
Ravi
Date Of Birth
2/02/1990
Date Of Joining
5/03/2003
Address
KK Nagar,Chennai
Department Name
Tamil
Phone Number
98434424
Designation
Professor
Gender
Male
Basic
20000
Bank Account No
iob4354546

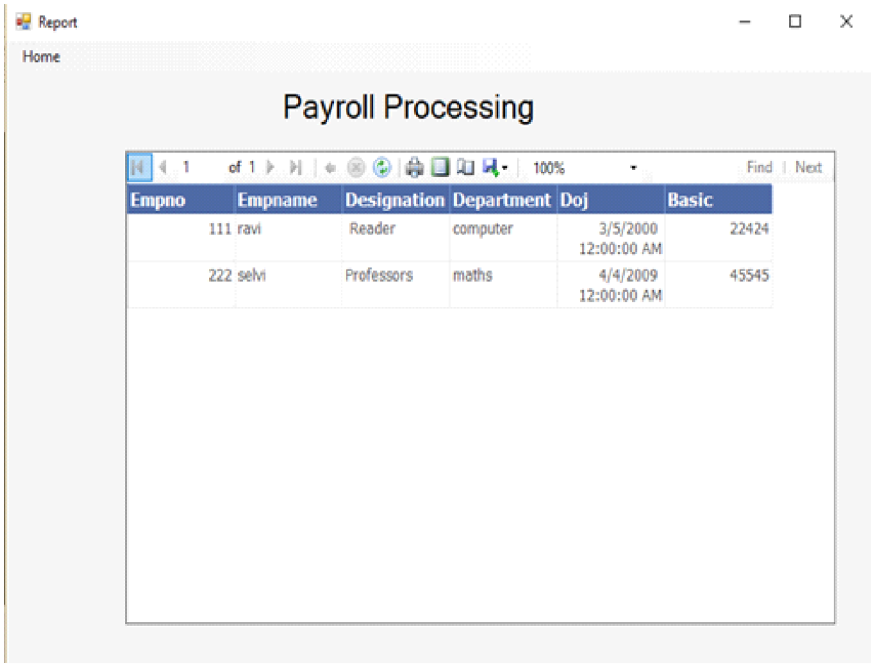

monthpay
File
Return
Add Record
Delete Record
Edit Record
Payroll Processing
Employee No
111
DA
124345.3
Employee Name
ravi
HRA
62172.65
Designation
North street
PF
24869.06
Basic
1243453
CROSS
1429970.95
Net Pay
1405101.89

PayRoll Report



Empno	Empname	Designation	Basic	Net Pay	Credit Month
111	ravi	North street	1243453	1405101.89	11/18/2018 9:33:33 AM
222	selvi	main road	345455	3903646.02	11/18/2018 9:34:30 AM

Employee Report



Empno	Empname	Designation	Department	Doj	Basic
111	ravi	Reader	computer	3/5/2000 12:00:00 AM	22424
222	selvi	Professors	maths	4/4/2009 12:00:00 AM	45545

8. Aim: To Create aquestioin and student database for conducting quiz and generate report for score details of the students

Table Name : quest

Field Name	Type	Description
Qno	Currency	Question Number
Question	Text	Question
Ans	Text	Answer for question
ch1	Text	Choice 1
ch2	Text	Choice 2
ch3	Text	Choice 3
ch4	Text	Choice 4

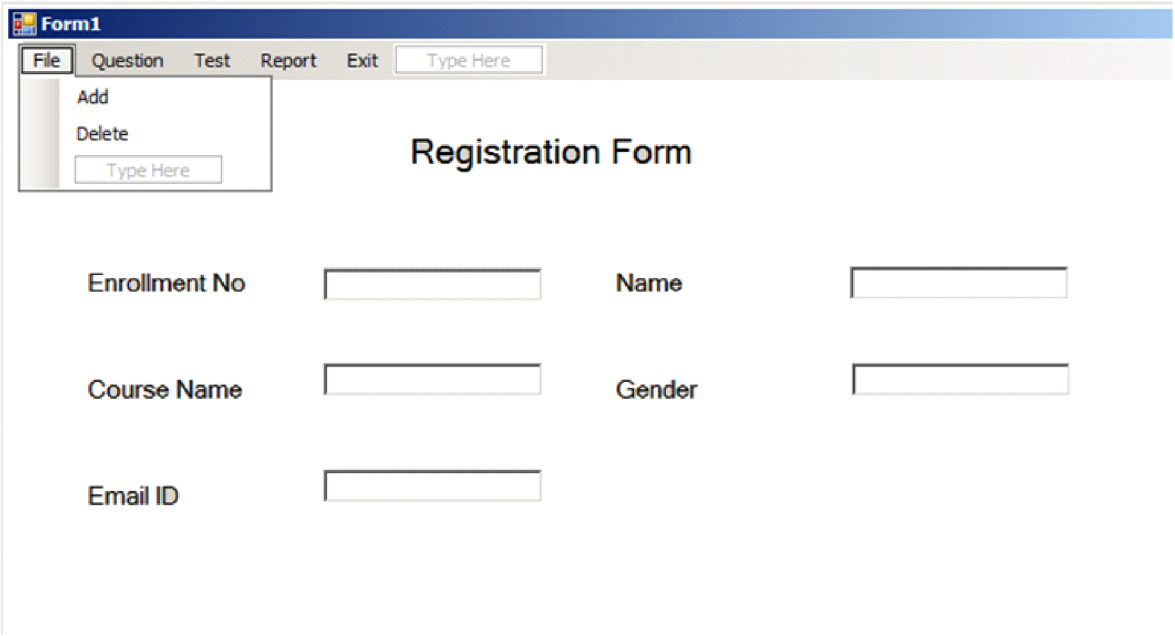
Table Name : student

Field Name	Type	Description
enrno	Currency	Enrollment Number
sname	Text	Student Name
cname	Text	Course Name
sex	Text	Sex
emailed	Text	emailID

Table Name : test

Field Name	Type	Description
enrno	Currency	Enrollment Number
sname	Text	Student Name
correct	Currency	No of correct
wrong	Currency	No of wrong
total	Currency	Total Marks

Form Design



Coding

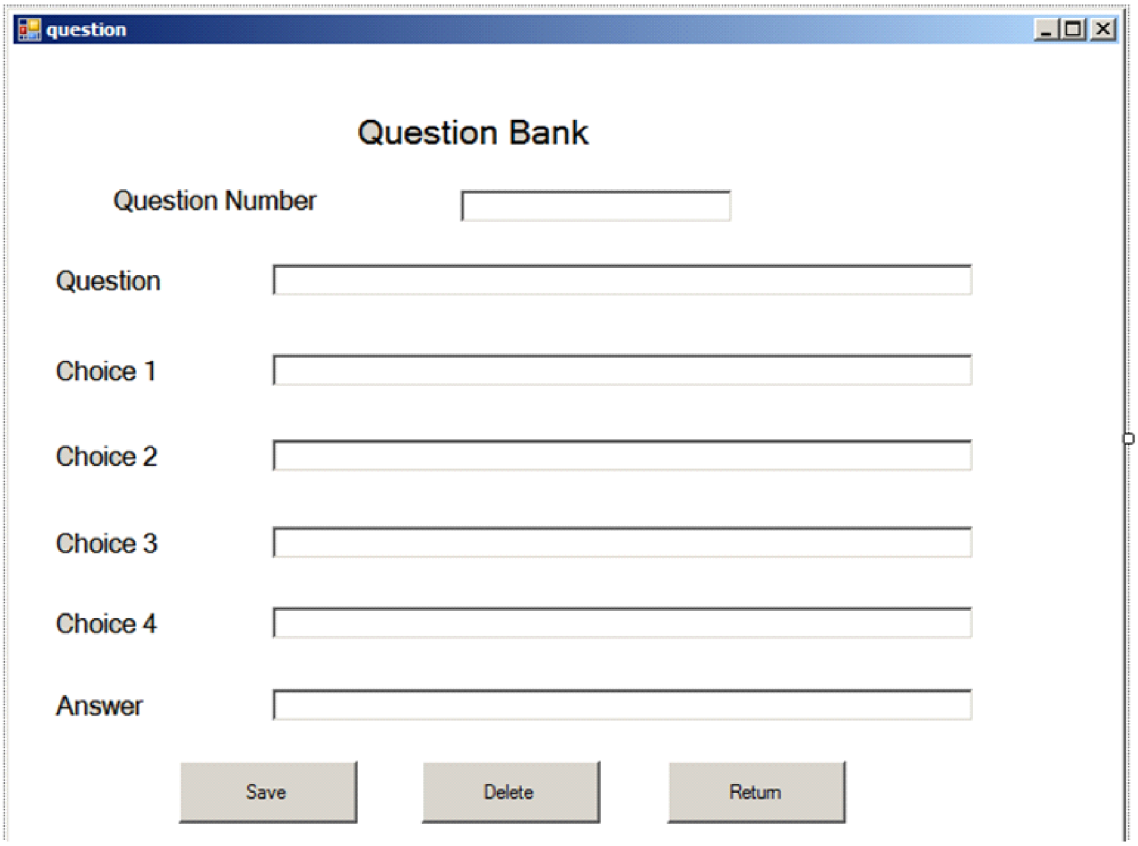
```
Imports ADODB
PublicClassForm1
Dim con AsNew ADODB.Connection
Dim rs AsNew ADODB.Recordset
Dim cmd AsNew ADODB.Command
Dim flag AsInteger = 1
Dim no AsString
PrivateSub Form1_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) HandlesMyBase.Load
    con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\quiz\quiz\quiz.accdb")
    MsgBox("Connected")
EndSub
```

```
PrivateSub AddToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles AddToolStripMenuItem.Click
    cmd.ActiveConnection = con
    cmd.CommandText = "insert into student
        values(@Enrno,@sname,@cname,@sex,@emailid)"
    cmd.Parameters.Item(0).Value = tenrno.Text
    cmd.Parameters.Item(1).Value = tname.Text
    cmd.Parameters.Item(2).Value = tcname.Text
    cmd.Parameters.Item(3).Value = tgender.Text
    cmd.Parameters.Item(4).Value = temai.Text
    cmd.Execute()
    MsgBox(" Record Added Successfully")
    clr()
EndSub

PrivateSub DeleteToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles DeleteToolStripMenuItem.Click
    cmd.ActiveConnection = con
    no = InputBox("Enter the Student Name")
    cmd.CommandText = "select * from student where sname=@sname"
    cmd.Parameters.Item(0).Value = no
    rs = cmd.Execute()
DoUntil rs.EOF
        cmd.CommandText = "delete * from student where sname=@sname"
        cmd.Parameters.Item(0).Value = no
        rs = cmd.Execute()
        flag = 0
        MsgBox(" Record Deleted Successfully")
        clr()
Loop
```

```
If flag = 1 Then
        MsgBox("  InVaild Student Name")
EndIf
EndSub
PublicFunction clr()
      tenrno.Text = ""
      tcname.Text = ""
      tgender.Text = ""
      temai.Text = ""
EndFunction

PrivateSub TestToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
          System.EventArgs) Handles TestToolStripMenuItem.Click
Me.Hide()
test.Show()
EndSub

PrivateSub QuestionToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e
          As System.EventArgs) Handles QuestionToolStripMenuItem.Click
Me.Hide()
question.Show()
EndSub

PrivateSub ExitToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
          System.EventArgs) Handles ExitToolStripMenuItem.Click
End
EndSub
```

```
PrivateSub ReportToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles ReportToolStripMenuItem.Click
Me.Hide()
Report.Show()
EndSub
EndClass
```

Question coding



Question coding

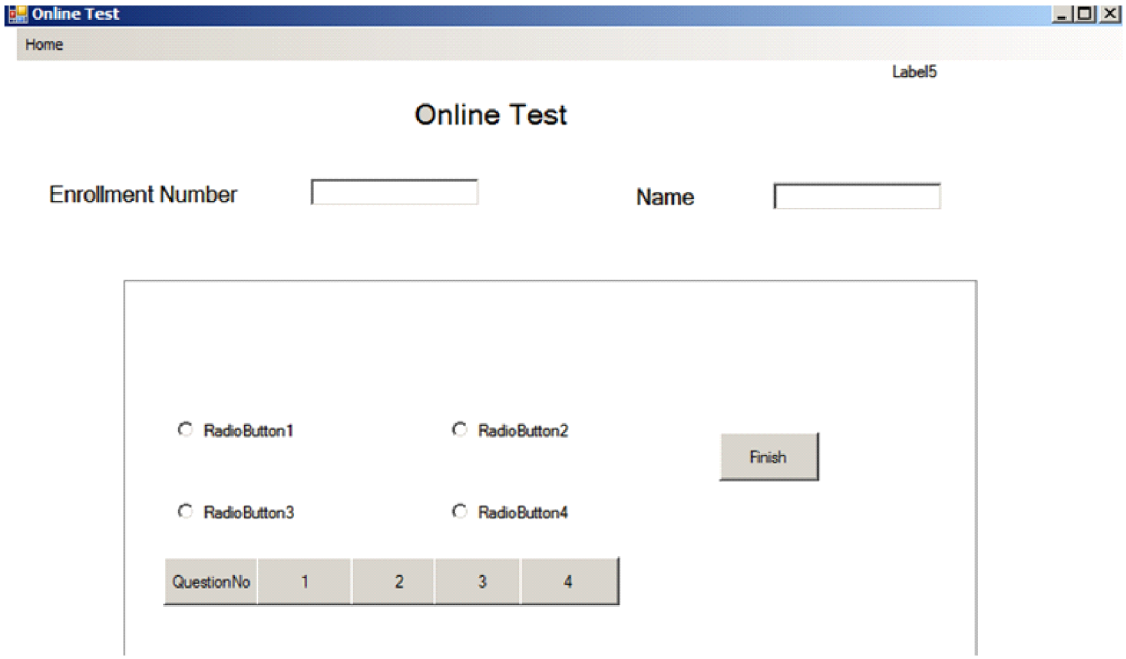
```
PublicClassquestion
Dim con AsNew ADODB.Connection
Dim rs AsNew ADODB.Recordset
```

```
Dim cmd AsNew ADODB.Command
Dim flag AsInteger = 1
Dim no AsString
PrivateSub question_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) HandlesMyBase.Load
    con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\quiz\quiz\quiz.accdb")
EndSub

PrivateSub btsave_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btsave.Click
    cmd.ActiveConnection = con
    cmd.CommandText = "insert into quest
        values(@qno,@question,@ans,@ch1,@ch2,@ch3,@ch4) "
    cmd.Parameters.Item(0).Value = tqno.Text
    cmd.Parameters.Item(1).Value = tquest.Text
    cmd.Parameters.Item(2).Value = tans.Text
    cmd.Parameters.Item(3).Value = tch1.Text
    cmd.Parameters.Item(4).Value = tch2.Text
    cmd.Parameters.Item(5).Value = tch3.Text
    cmd.Parameters.Item(6).Value = tch4.Text
    cmd.Execute()
    MsgBox(" Question Added Successfully")
EndSub

PrivateSub btdelete_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btdelete.Click
    cmd.ActiveConnection = con
Dim n AsInteger = Val(InputBox("Enter the question number"))
    cmd.CommandText = "select * from quest where qno=?"
    cmd.Parameters.Item(0).Value = n
```

```
        rs = cmd.Execute()
DoUntil rs.EOF
        tqno.Text = rs.Fields(0).Value
        tquest.Text = rs.Fields(1).Value
        tans.Text = rs.Fields(2).Value
        tch1.Text = rs.Fields(3).Value
        tch2.Text = rs.Fields(4).Value
        tch3.Text = rs.Fields(5).Value
        tch4.Text = rs.Fields(6).Value
        cmd.CommandText = “delete * from quest where qno=?”
        cmd.Parameters.Item(0).Value = n
        cmd.Execute()
        rs.MoveNext()
        clr()
        flag = 0
        MsgBox(“ Question Deleted Successfully”)
Loop
If flag = 1 Then
        MsgBox(“ Enter the Vaild Question Number”)
EndIf
EndSub
PublicFunction clr()
      tqno.Text = “”
      tquest.Text = “”
      tans.Text = “”
      tch1.Text = “”
      tch2.Text = “”
      tch3.Text = “”
      tch4.Text = “”
EndFunction
```

```
PrivateSub btreturn_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btreturn.Click
Me.Hide()
Form1.Show()
EndSub
EndClass
```

Online test form



Coding

```
PublicClasstest
Dim con AsNew ADODB.Connection
Dim rs AsNew ADODB.Recordset
Dim cmd AsNew ADODB.Command
Dim flag AsInteger = 1
Dim no AsString
Dim corr, wrng, t AsInteger
```

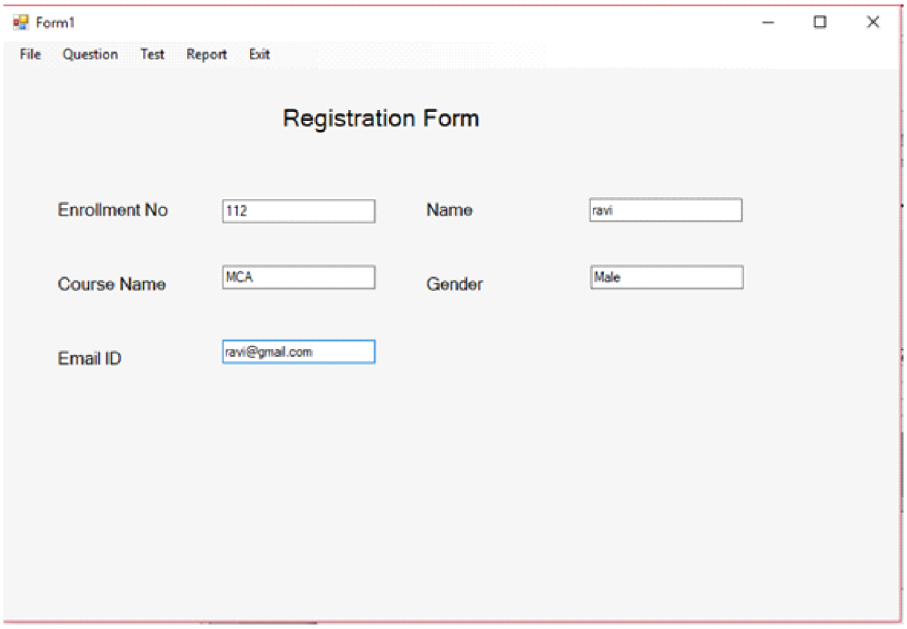
```
PrivateSub bt1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
        Handles bt1.Click, bt2.Click, bt3.Click, bt4.Click
    RadioButton1.Visible = True
    RadioButton2.Visible = True
    RadioButton3.Visible = True
    RadioButton4.Visible = True
    cmd.ActiveConnection = con
    cmd.CommandText = “select * from quest where qno=?”
    cmd.Parameters.Item(0).Value = sender.text
    rs = cmd.Execute()
DoUntil rs.EOF
        qno.Text = rs.Fields(0).Value
        quest.Text = rs.Fields(1).Value
        RadioButton1.Text = rs.Fields(3).Value
        RadioButton2.Text = rs.Fields(4).Value
        RadioButton3.Text = rs.Fields(5).Value
        RadioButton4.Text = rs.Fields(6).Value
        rs.MoveNext()
Loop
EndSub

PrivateSub HomeToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles HomeToolStripMenuItem.Click
Me.Hide()
Form1.Show()
EndSub

PrivateSub btsave_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs)
EndSub
```

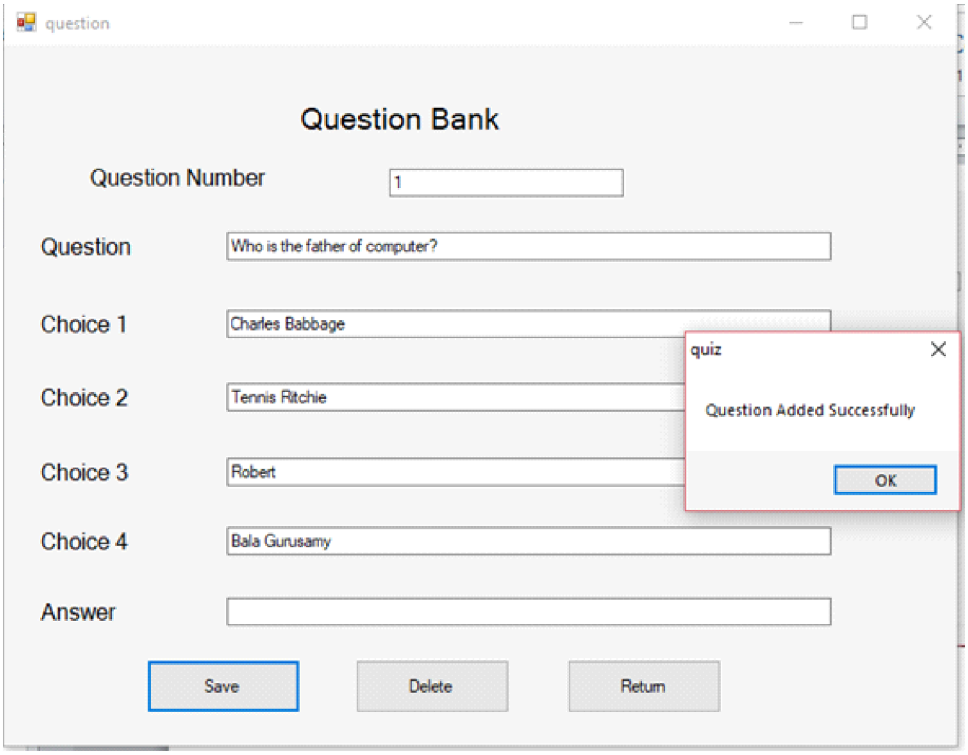
```
PrivateSub test_Load(ByVal sender As System.Object, ByVal e As System.EventArgs)
        HandlesMyBase.Load
    con.Open("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\quiz\quiz\quiz.accdb")
    Timer1.Start()
    t = 0
    corr = 0
    wrng = 0
    time.Text = 200
    RadioButton1.Visible = False
    RadioButton2.Visible = False
    RadioButton3.Visible = False
    RadioButton4.Visible = False
EndSub
PublicFunction disp()
    MsgBox(" Time Out")
    bt1.Enabled = False
    bt2.Enabled = False
    bt3.Enabled = False
    bt4.Enabled = False
EndFunction

PrivateSub Timer1_Tick(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles Timer1.Tick
    time.Text = Val(time.Text) - 1
If Val(time.Text) <= 0 Then
        Timer1.Stop()
        disp()
If corr = 3 Then
```

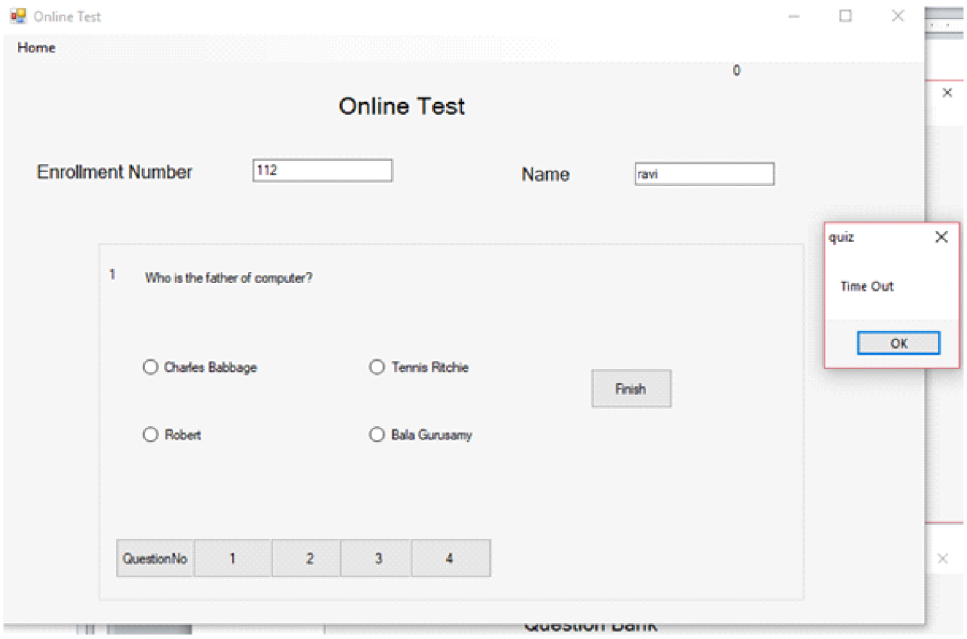
```
            wrng = 1
ElseIf corr = 2 Then
            wrng = 2
ElseIf corr = 1 Then
            wrng = 3
Else
            wrng = 4
EndIf
EndIf
EndSub

PrivateSub btfinish_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btfinish.Click
    cmd.ActiveConnection = con
    cmd.CommandText = "insert into test
        values(@enrno,@sname,@correct,@wrong,@total)"
    cmd.Parameters.Item(0).Value = tenrno.Text
    cmd.Parameters.Item(1).Value = tname.Text
    cmd.Parameters.Item(2).Value = corr.ToString
    cmd.Parameters.Item(3).Value = wrng.ToString
    cmd.Parameters.Item(4).Value = (Val(corr.ToString) * 25)
    cmd.Execute()
    MsgBox("Marks Updated Successfully")
    Timer1.Stop()
EndSub

PrivateSub RadioButton1_Click(ByVal sender AsObject, ByVal e As System.EventArgs)
        Handles RadioButton1.Click, RadioButton2.Click, RadioButton3.Click,
        RadioButton4.Click
    cmd.ActiveConnection = con
    cmd.CommandText = "select ans from quest where qno=?"
```

```
        cmd.Parameters.Item(0).Value = qno.Text
        cmd.Execute()
    If qno.Text = 1 And RadioButton1.Checked = TrueThen
            corr = corr + 1
    ElseIf qno.Text = 2 And RadioButton2.Checked = TrueThen
            corr = corr + 1
    ElseIf qno.Text = 3 And RadioButton3.Checked = TrueThen
            corr = corr + 1
    ElseIf qno.Text = 4 And RadioButton4.Checked = TrueThen
            corr = corr + 1
    Else
            wrng = wrng + 1
    EndIf
    EndSub
    EndClass
```

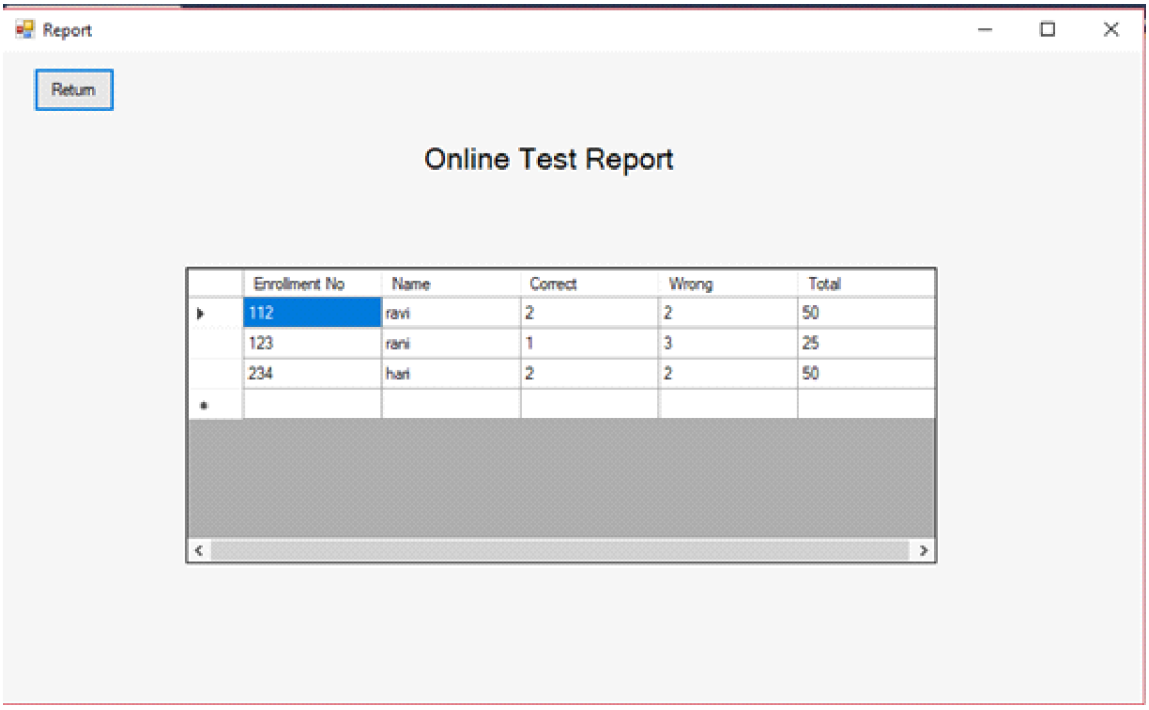
Output




question
Question Bank
Question Number
1
Question
Who is the father of computer?
Choice 1
Charles Babbage
Choice 2
Tennis Ritchie
Choice 3
Robert
Choice 4
Bala Gurusamy
Answer
Save
Delete
Return
quiz
Question Added Successfully
OK


Online Test
Home
0
Online Test
Enrollment Number
112
Name
ravi
1
Who is the father of computer?
Charles Babbage
Tennis Ritchie
Robert
Bala Gurusamy
Finish
QuestionNo
1
2
3
4
quiz
Time Out
OK

Report


Report
Return
Online Test Report
Enrollment No
Name
Correct
Wrong
Total
112
ravi
2
2
50
123
rani
1
3
25
234
hari
2
2
50

9. To create library master, member and transaction database for library maintenance and create reports for the same

Book table Name : master

Field Name	Type	Description
accno	Currency	Book Number
bname	Text	Name of the Book
aname	Text	Name of the Author
publ	Text	Name of the Publication
Price	Currency	Cost of the Book
cop	Currency	No of copies

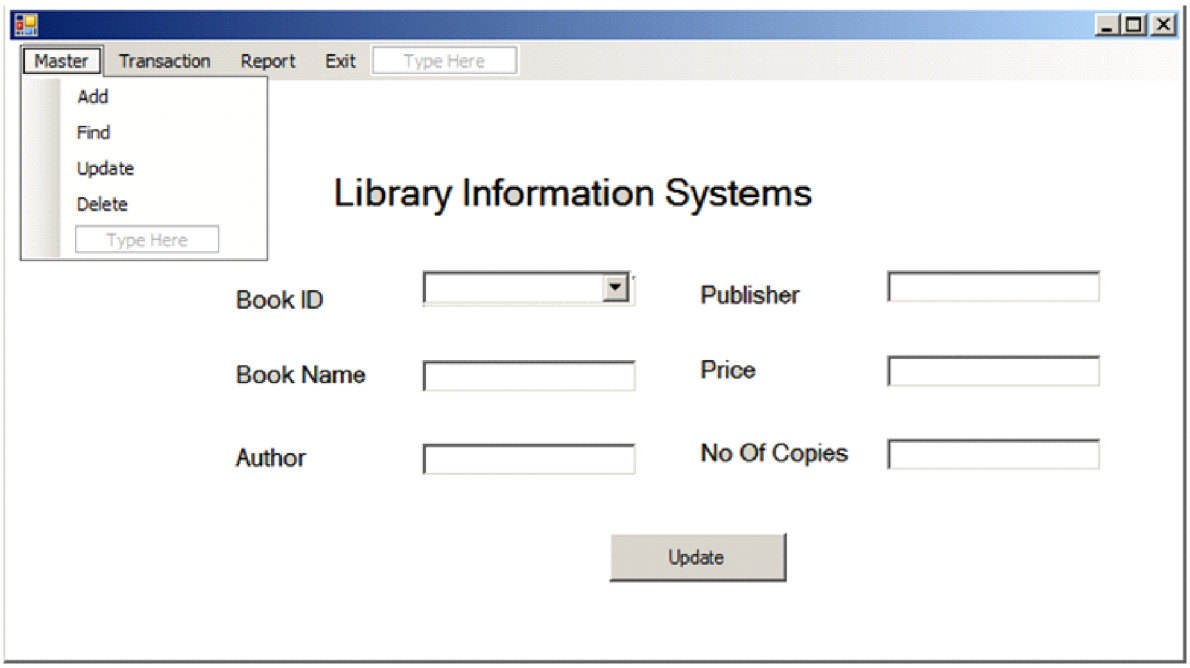
Member Table : member

Field Name	Type	Description
enrno	Text	Enrollment Number
sname	Text	Name of the student
cname	Text	Name of the course
cocard	Currency	No of card

Issue return Table Name : trans

Field name	Type	Description
enrno	Text	Enrollment Number
sname	Text	Name of the student
cname	Text	Name of the course
bname	Text	Book Name
issuedt	Date	Issue date
redt	Date	Return date
nocard	Currency	No of cards
fine	Currency	Collect the fine

Form Designing:



Coding

```
Imports System.Data.OleDb
PublicClassForm1
Dim con AsNewOleDbConnection
Dim cmd AsNewOleDbCommand
Dim dr AsOleDbDataReader
PrivateSub Form1_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) HandlesMyBase.Load
    con = NewOleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\library\library\library.accdb")
    con.Open()
    combaccno.Visible = False
    btupdate.Visible = False
    MsgBox("Connected")
EndSub
```

```
PrivateSub AddToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles AddToolStripMenuItem.Click
    combaccno.Visible = False
    taccno.Visible = True
    btupdate.Visible = False
    cmd.Connection = con
    cmd.CommandText = "insert into master
        values(@accno,@bname,@aname,@publ,@price,@cop)"
    cmd.Parameters.AddWithValue("@accno", Convert.ToInt32(taccno.Text))
    cmd.Parameters.AddWithValue("@bname", tbkname.Text)
    cmd.Parameters.AddWithValue("@aname", tauthor.Text)
    cmd.Parameters.AddWithValue("@publ", tpubl.Text)
    cmd.Parameters.AddWithValue("@price", Convert.ToDecimal(tprice.Text))
    cmd.Parameters.AddWithValue("@cop", Convert.ToInt32(tcopy.Text))
    cmd.ExecuteNonQuery()
    MsgBox("Records Added Successfully")
    taccno.Text = ""
    tbkname.Text = ""
    tauthor.Text = ""
    tpubl.Text = ""
    tprice.Text = ""
    tcopy.Text = ""
    con.Close()
EndSub

PrivateSub FindToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles FindToolStripMenuItem.Click
    combaccno.Visible = False
    taccno.Visible = True
    btupdate.Visible = False
```

```
Dim n, flag AsInteger
      n = Val(InputBox("Enter the Book - Id "))
       cmd.Connection = con
       cmd.CommandText = "select * from master "
       dr = cmd.ExecuteReader()
While (dr.Read())
If (Convert.ToInt32(dr(0).ToString) = n) Then
            taccno.Text = dr(0).ToString
            tbkname.Text = dr(1).ToString
            tauthor.Text = dr(2).ToString
            tpubl.Text = dr(3).ToString
            tprice.Text = dr(4).ToString
            tcopy.Text = dr(5).ToString
            flag = 1
EndIf
EndWhile
If flag = 0 Then
         MsgBox("Not Found")
EndIf
       dr.Close()
EndSub

PrivateSub DeleteToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles DeleteToolStripMenuItem.Click
       combaccno.Visible = False
       taccno.Visible = True
      btupdate.Visible = False
Dim n, flag AsInteger
      n = Val(InputBox("Enter the Book - Id "))
       cmd.Connection = con
```

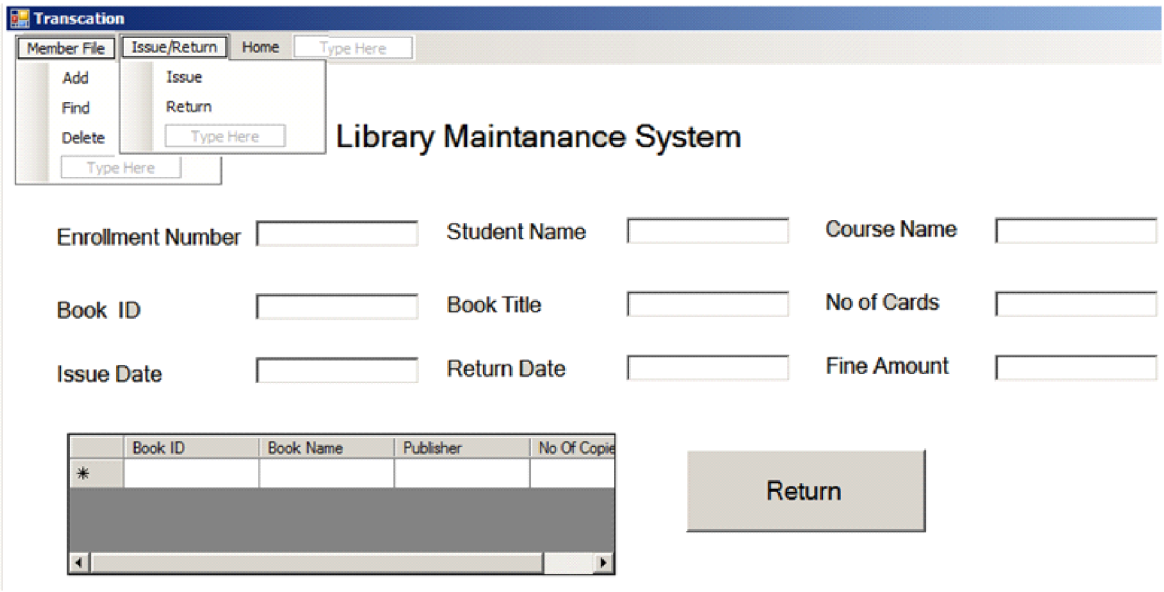
```
        cmd.CommandText = “select * from master “
        dr = cmd.ExecuteReader()
While (dr.Read())
If (Convert.ToInt32(dr(0).ToString) = n) Then
            cmd = NewOleDbCommand(“delete from master where accno=@accno”,
          con)
            cmd.Parameters.AddWithValue(“@accno”, n)
            cmd.ExecuteNonQuery()
            MsgBox(“record deleted “)
            flag = 1
EndIf
EndWhile
If flag = 0 Then
        MsgBox(“Book Not Found”)
EndIf
EndSub

PrivateSub UpdateToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
          System.EventArgs) Handles UpdateToolStripMenuItem.Click
        combaccno.Visible = True
        Btupdate.Visible = True
        taccno.Visible = False
        cmd.Connection = con
        cmd.CommandText = “select * from master”
        dr = cmd.ExecuteReader()
While dr.Read()
        combaccno.Items.Add(dr(“accno”).ToString)
EndWhile
        dr.Close()
EndSub
```

```
PrivateSub btupdate_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles btupdate.Click
Dim str AsString
    str = "Update master set bname=?,aname=?,publ=?,price=?,cop=? where
        accno=?"
    cmd = NewOleDbCommand(str, con)
    cmd.Parameters.AddWithValue("@bname", tbkname.Text)
    cmd.Parameters.AddWithValue("@aname", tauthor.Text)
    cmd.Parameters.AddWithValue("@publ", tpubl.Text)
    cmd.Parameters.AddWithValue("@price", Convert.ToDecimal(tprice.Text))
    cmd.Parameters.AddWithValue("@cop", Convert.ToInt32(tcopy.Text))
    cmd.Parameters.AddWithValue("@accno", Convert.ToInt32(taccno.Text))
    cmd.ExecuteNonQuery()
    MsgBox("Records Updated Successfully")
    taccno.Text = ""
    tbkname.Text = ""
    tauthor.Text = ""
    tpubl.Text = ""
    tprice.Text = ""
    tcopy.Text = ""
    combaccno.Visible = False
EndSub

PrivateSub combaccno_SelectedIndexChanged(ByVal sender As System.Object, ByVal
        e As System.EventArgs) Handles combaccno.SelectedIndexChanged
    cmd.Connection = con
    cmd.CommandText = "select * from master where accno=@accno"
    cmd.Parameters.AddWithValue("@accno", combaccno.SelectedItem)
    dr = cmd.ExecuteReader()
While dr.Read()
```

```
            taccno.Text = dr(0).ToString
            tbkname.Text = dr(1).ToString
            tauthor.Text = dr(2).ToString
            tpubl.Text = dr(3).ToString
            tprice.Text = dr(4).ToString
            tcopy.Text = dr(5).ToString
        EndWhile
        EndSub

        PrivateSub ExitToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
                System.EventArgs) Handles ExitToolStripMenuItem.Click
        End
        EndSub

        PrivateSub TransactionToolStripMenuItem_Click(ByVal sender As System.Object, ByVal
                e As System.EventArgs) Handles TransactionToolStripMenuItem.Click
        Me.Hide()
        Transcation.Show()
        EndSub

        PrivateSub BookReportToolStripMenuItem_Click(ByVal sender As System.Object, ByVal
                e As System.EventArgs) Handles BookReportToolStripMenuItem.Click
        Me.Hide()
        report.Show()
            report.ReportViewer1.Show()
            report.ReportViewer2.Hide()
        EndSub
        PrivateSub IssuseReportToolStripMenuItem_Click(ByVal sender As System.Object,
                ByVal e As System.EventArgs) Handles IssuseReportToolStripMenuItem.Click
        Me.Hide()
```

```
report.Show()
    report.ReportViewer2.Show()
    report.ReportViewer1.Hide()
EndSub
EndClass
```

Transaction form



Coding

```
Imports System.Data.OleDb
PublicClassTranscation
Dim con AsNewOleDbConnection
Dim cmd, cmd1, cmd2 AsNewOleDbCommand
Dim dr, dr1 AsOleDbDataReader
Dim enrno, flag, cop AsInteger
Dim bname AsString
PrivateSub Transcation_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) HandlesMyBase.Load
```

```
'TODO: This line of code loads data into the 'LibraryDataSet1.master' table. You can
        move, or remove it, as needed.
Me.MasterTableAdapter.Fill(Me.LibraryDataSet1.master)
'TODO: This line of code loads data into the 'LibraryDataSet2.master' table. You can
        move, or remove it, as needed.
'TODO: This line of code loads data into the 'LibraryDataSet1.member' table. You can
        move, or remove it, as needed.
    con = NewOleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\library\library\library.accdb")
    con.Open()
    btissue.Visible = False
    bt.Visible = False
    btret.Visible = False
EndSub

PrivateSub AddToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles AddToolStripMenuItem.Click
    bt.Visible = True
    btissue.Visible = False
    btret.Visible = False
    taccno.Enabled = False
    tbktitle.Enabled = False
    tissue.Enabled = False
    tretdt.Enabled = False
    tfine.Enabled = False
EndSub

PrivateSub HomeToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles HomeToolStripMenuItem.Click
Me.Hide()
```

```
Form1.Show()
EndSub

PrivateSub MemberFileToolStripMenuItem_Click(ByVal sender As System.Object, ByVal
        e As System.EventArgs) Handles MemberFileToolStripMenuItem.Click
    taccno.Enabled = False
    tbktitle.Enabled = False

    tissue.Visible = False
    tretdt.Visible = False
    tfine.Enabled = False
EndSub

PrivateSub DeleteToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles DeleteToolStripMenuItem.Click
    bt.Visible = False
    btissue.Visible = False
    btret.Visible = False
Dim n, flag AsInteger
    n = Val(InputBox("Enter the Member - Id "))
    cmd.Connection = con
    cmd.CommandText = "select * from member "
    dr = cmd.ExecuteReader()
While (dr.Read())
If (Convert.ToInt32(dr(0).ToString) = n) Then
        cmd = NewOleDbCommand("delete from member where enrno=@enrno",
        con)
        cmd.Parameters.AddWithValue("@enrno", n)
        cmd.ExecuteNonQuery()
```

```
            MsgBox("Member deleted ")
            flag = 1
EndIf
EndWhile
If flag = 0 Then
        MsgBox("Member Not Found")
EndIf
      dr.Close()
EndSub

PrivateSub FindToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles FindToolStripMenuItem.Click
      bt.Visible = False
      btissue.Visible = False
      btret.Visible = False
Dim n, flag AsInteger
      n = Val(InputBox("Enter the Book - Id "))
      cmd.Connection = con
      cmd.CommandText = "select * from member "
      dr = cmd.ExecuteReader()
While (dr.Read())
If (Convert.ToInt32(dr(0).ToString) = n) Then
            terno.Text = dr(0).ToString
            tname.Text = dr(1).ToString
            tcourse.Text = dr(2).ToString
            tnocard.Text = dr(3).ToString
            flag = 1
EndIf
        terno.Text = ""
        tname.Text = ""
```

```
            tcourse.Text = “”
            tnocard.Text = “”
EndWhile
If flag = 0 Then
            MsgBox(“Not Found”)
EndIf
        dr.Close()
EndSub

PrivateSub IssueToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles IssueToolStripMenuItem.Click
        btissue.Visible = True
        bt.Visible = False
        btret.Visible = False
        cop = 0
Dim n, flag AsInteger
        n = Val(InputBox(“Enter the Book ID”))
        enrno = Val(InputBox(“Enter the Student Enrollment No”))
        cmd1.Connection = con
        cmd1.CommandText = “select * from master where accno=@accno”
        cmd1.Parameters.AddWithValue(“@accno”, Val(n))
        dr = cmd1.ExecuteReader()
While (dr.Read())
If dr(5) > 0 Then
            cop = dr(5).ToString
            MsgBox(cop)
            flag = 1
            taccno.Text = n
            tbktitle.Text = dr(1).ToString
            tissue.Text = Date.Now
```

```
            tretdt.Text = Convert.ToDateTime(tissue.Text).AddDays(15).ToString
            tfine.Text = 0
Else
            MsgBox(" Book Not Available")
EndIf
EndWhile
        dr.Close()
        dispmember()
EndSub

PrivateSub btissue_Click(ByVal sender AsObject, ByVal e As System.EventArgs)
            Handles btissue.Click
        cmd = NewOleDbCommand("update master set cop=? where accno=?", con)
        cmd.Parameters.AddWithValue("@cop", cop - 1)
        cmd.Parameters.AddWithValue("@accno", taccno.Text)
        cmd.ExecuteNonQuery()
        cmd.Dispose()
'update no of card
        cmd1.Connection = con
        cmd1 = NewOleDbCommand("update member set nocard=? where enrno=?",
            con)
        cmd1.Parameters.AddWithValue("@nocard", Val(tnocard.Text) - 1)
        cmd1.Parameters.AddWithValue("@enrno", terno.Text)
        cmd1.ExecuteNonQuery()
        cmd2.CommandText = "insert into trans
            values(@enrno,@sname,@cname,@bname,@issusedt,@redt,@nocard,@fine)"
        cmd2.Connection = con
        cmd2.Parameters.AddWithValue("@enrno", terno.Text)
        cmd2.Parameters.AddWithValue("@sname", tname.Text)
        cmd2.Parameters.AddWithValue("@cname", tcourse.Text)
```

```
    cmd2.Parameters.AddWithValue("@bname", tbktitle.Text)
    cmd2.Parameters.AddWithValue("@issusedt", tissue.Text)
    cmd2.Parameters.AddWithValue("@redt", tretdt.Text)
    cmd2.Parameters.AddWithValue("@nocard", tnocard.Text)
    cmd2.Parameters.AddWithValue("@fine", 0)
    cmd2.ExecuteNonQuery()
    MsgBox("Book Issused")
    flag = 1
    btissue.Enabled = False
    bt.Enabled = False
    btret.Enabled = False
    dr.Close()
If flag = 0 Then
        MsgBox("Book not Issuse")
EndIf
EndSub

PrivateSub ReturnToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles ReturnToolStripMenuItem.Click
    bt.Visible = False
    btissue.Visible = False
    btret.Visible = True
    cop = 0
    bname = InputBox("Enter the Book Name ")
    enrno = Val(InputBox("Enter the Student ENrollment No "))
    cmd.Connection = con
    cmd.CommandText = "select * from trans where enrno=@enrno and
        bname=@bname"
    cmd.Parameters.AddWithValue("@enrno", enrno)
    cmd.Parameters.AddWithValue("@bname", bname)
```

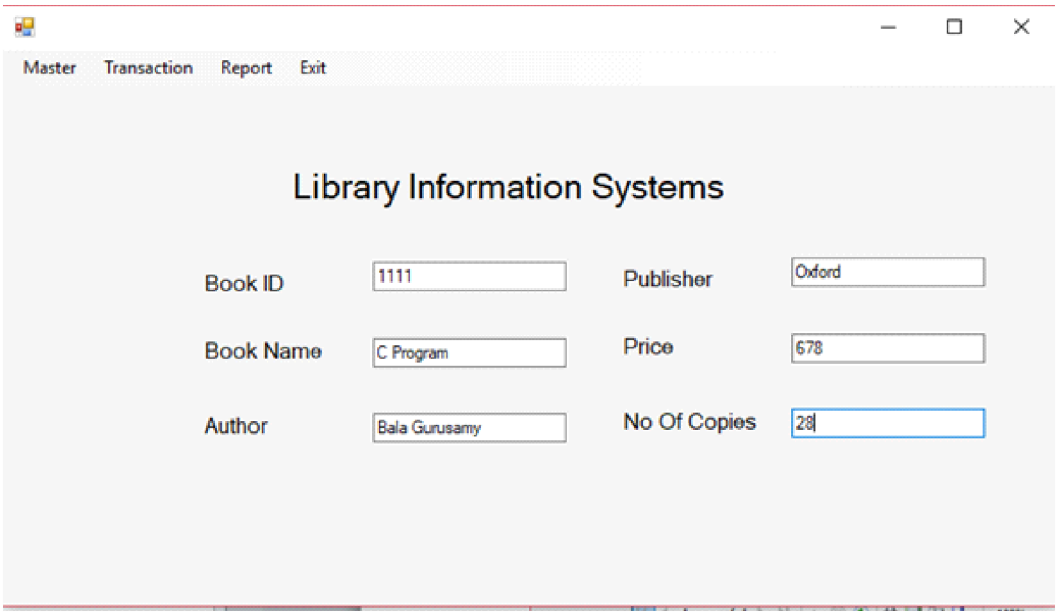
```
        dr1 = cmd.ExecuteReader()
While (dr1.Read())
            terno.Text = dr1(0).ToString
            tname.Text = dr1(1).ToString
            tcourse.Text = dr1(2).ToString
            tbktitle.Text = dr1(3).ToString
            tissue.Text = dr1(4).ToString
            tretdt.Text = dr1(5).ToString
            tnocard.Text = dr1(6).ToString
            flag = 0
EndWhile
IfDate.Compare(CDate(tretdt.Text), CDate(Date.Now)) < 0 Then
            tfine.Text = 100
Else
            tfine.Text = 0
EndIf
        dr1.Close()
EndSub

PrivateSub btret_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
              Handles btret.Click
If flag = 1 Then
            MsgBox(" Invalid Book ID")
Else
            cmd1.Connection = con
            cmd1.CommandText = "select * from member where enrno=@enrno "
            cmd1.Parameters.AddWithValue("@enrno", enrno)
            cmd1.ExecuteNonQuery()
            dr1 = cmd1.ExecuteReader()
While (dr1.Read())
```

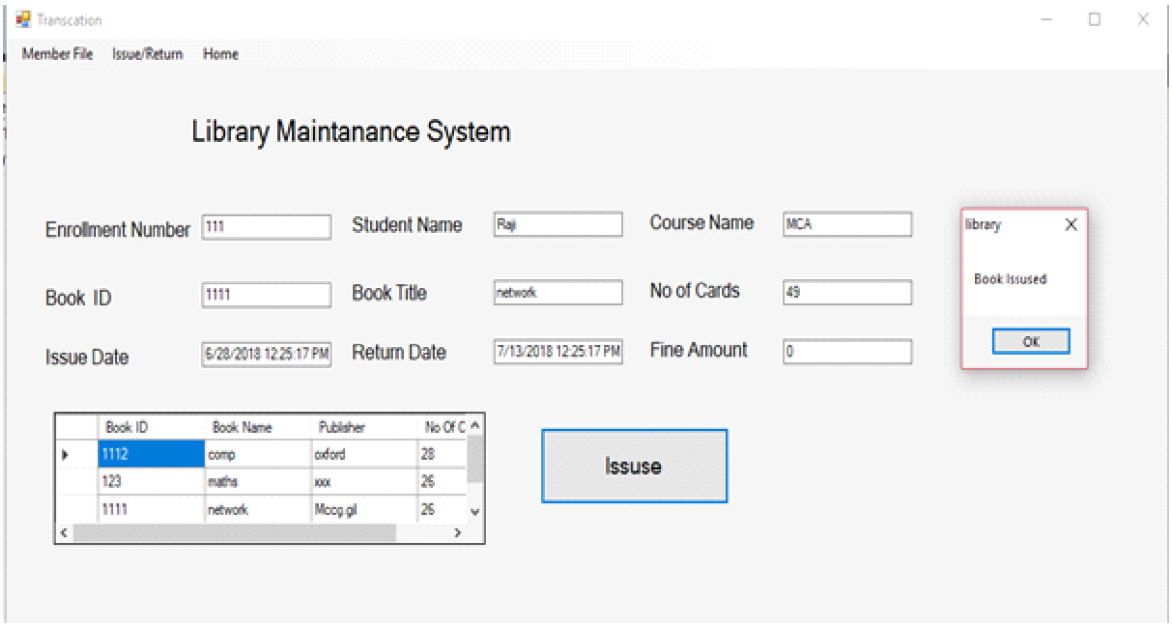
```
cmd1 = NewOleDbCommand("update member set nocard=? where
enrno=?", con)
cmd1.Parameters.AddWithValue("@nocard", Val(tnocard.Text) + 1)
cmd1.Parameters.AddWithValue("@enrno", dr1(0).ToString)
cmd1.ExecuteNonQuery()
EndWhile
dr1.Close()
cmd.Connection = con
cmd.CommandText = "select * from master "
dr1 = cmd.ExecuteReader()
While (dr1.Read())
If (dr1(1).ToString = bname) Then
flag = 1
tbktitle.Text = dr1(1).ToString
taccno.Text = dr1(0).ToString
cmd = NewOleDbCommand("update master set cop=? where accno=?",
con)
cmd.Parameters.AddWithValue("@cop", Convert.ToInt32(dr1(5).ToString) +
1)
cmd.Parameters.AddWithValue("@accno", dr1(0).ToString)
cmd.ExecuteNonQuery()
cmd.Dispose()
cmd2 = NewOleDbCommand("update trans set redt=?,fine=?,nocard=?
where enrno=? and bname=?", con)
cmd2.Parameters.AddWithValue("@redt", tretdt.Text)
cmd2.Parameters.AddWithValue("@fine", tfine.Text)
cmd2.Parameters.AddWithValue("@nocard", Val(tnocard.Text) + 1)
cmd2.Parameters.AddWithValue("@enrno", terno.Text)
cmd2.Parameters.AddWithValue("@bname", tbktitle.Text)
```

```
                cmd2.ExecuteNonQuery()
                MsgBox("Book Return")
EndIf
EndWhile
If flag = 0 Then
            MsgBox("Book not Return")
EndIf
EndIf
EndSub
PublicFunction dispmember()
      cmd.Connection = con
      cmd.CommandText = "select sname,cname,nocard from member where
          enrno=?"
     cmd.Parameters.AddWithValue("@enrno", enrno.ToString)
      dr = cmd.ExecuteReader()
While dr.Read()
         tname.Text = dr(0).ToString
         tcourse.Text = dr(1).ToString
         tnocard.Text = dr(2).ToString
         terno.Text = enrno
EndWhile
      dr.Close()
EndFunction

PrivateSub bt_Click(ByVal sender As System.Object, ByVal e As System.EventArgs)
          Handles bt.Click
      cmd.Connection = con
      cmd.CommandText = "insert into member
          values(@enrno,@sname,@cname,@nocard)"
     cmd.Parameters.AddWithValue("@enrno", terno.Text)
```

```
        cmd.Parameters.AddWithValue("@sname", tname.Text)
        cmd.Parameters.AddWithValue("@cname", tcourse.Text)
       cmd.Parameters.AddWithValue("@nocard", Convert.ToInt32(tnocard.Text))
        cmd.ExecuteNonQuery()
        MsgBox("Member Added Successfully")
        terno.Text = ""
        tname.Text = ""
        tcourse.Text = ""
        tnocard.Text = ""
        taccno.Enabled = True
       tbktitle.Enabled = True
        tissue.Visible = True
        tretdt.Visible = True
        tfine.Visible = True
EndSub

PrivateSub tnocard_LostFocus(ByVal sender AsObject, ByVal e As System.EventArgs)
            Handles tnocard.LostFocus
If Val(tnocard.Text < 0) Then
          MsgBox("Card Not Available")
           btissue.Enabled = False
EndIf
EndSub
EndClass
```

Output


Master
Transaction
Report
Exit
Library Information Systems
Book ID
1111
Publisher
Oxford
Book Name
C Program
Price
678
Author
Bala Gurusamy
No Of Copies
28


Transcation
Member File
Issue/Return
Home
Library Maintanance System
Enrollment Number
111
Student Name
Raji
Course Name
MCA
Book ID
1111
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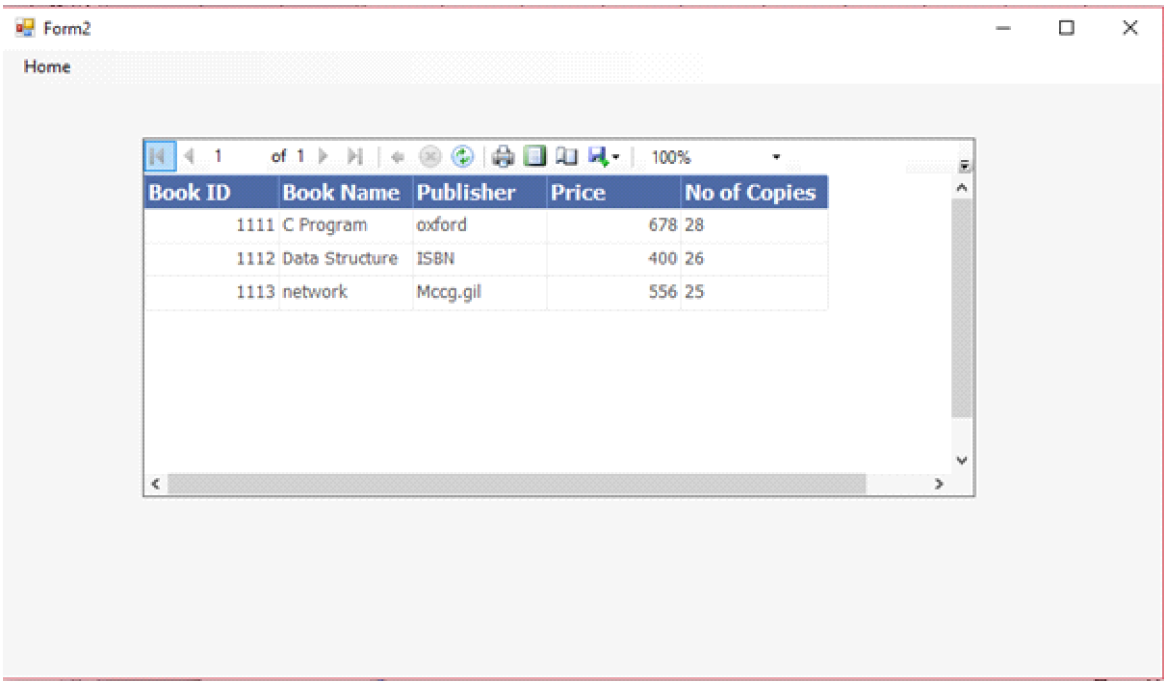
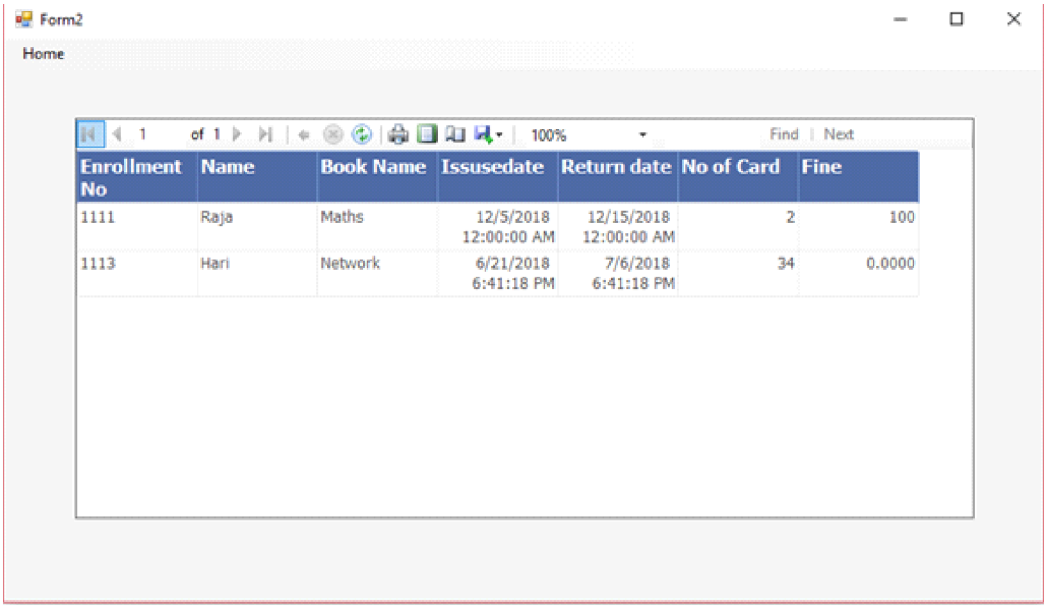
network
No of Cards
49
Issue Date
6/28/2018 12:25:17 PM
Return Date
7/13/2018 12:25:17 PM
Fine Amount
0
library
Book Issued
OK
Book ID
Book Name
Publisher
No Of C
1112
comp
oxford
28
123
maths
xxx
26
1111
network
Mcog.gl
26
Issuse



Book ID	Book Name	Publisher	Price	No of Copies
1111	C Program	oxford	678	28
1112	Data Structure	ISBN	400	26
1113	network	Mccg.gil	556	25



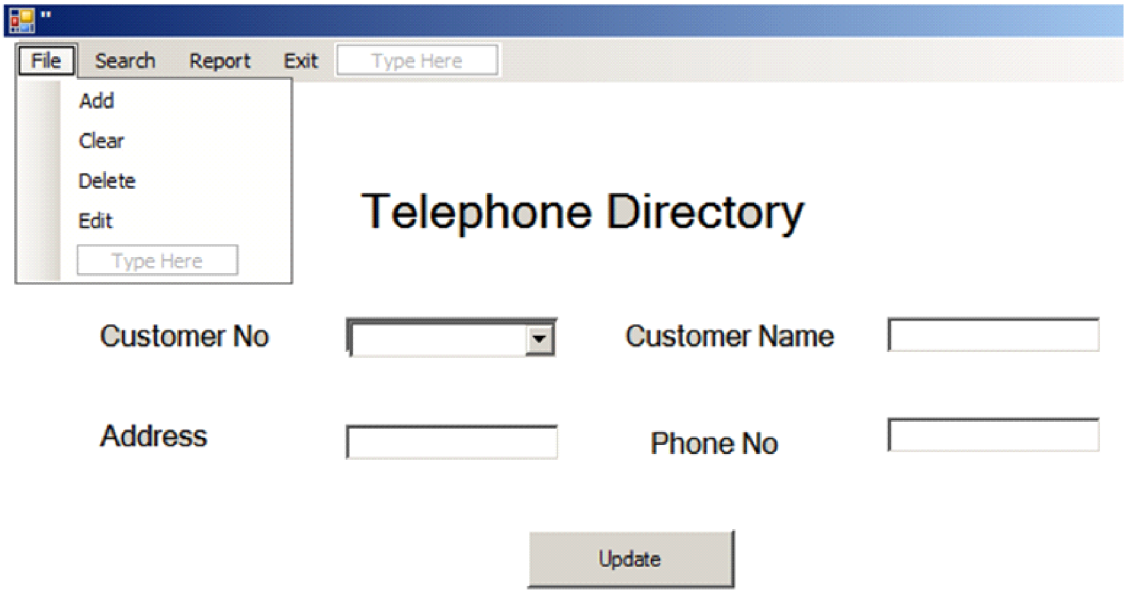
Enrollment No	Name	Book Name	Issusedate	Return date	No of Card	Fine
1111	Raja	Maths	12/5/2018 12:00:00 AM	12/15/2018 12:00:00 AM	2	100
1113	Hari	Network	6/21/2018 6:41:18 PM	7/6/2018 6:41:18 PM	34	0.0000

10. Aim: To create table for Telephone directory and provide the option to search and display.

Table structure

Field Name	Type	Description
custno	Currency	Customer Number
custname	Text	Name of the Customer
address	Text	Name of the address
phoneno	Currency	Phone Number

Form Design



Coding

```
Imports System.Data.OleDb
PublicClassForm1
Dim con AsNewOleDbConnection
Dim cmd, cmd1 AsNewOleDbCommand
Dim dr AsOleDbDataReader
Dim n AsDouble
Dim flag AsInteger = 0
```

```
PrivateSub Form1_Load(ByVal sender As System.Object, ByVal e As
        System.EventArgs) HandlesMyBase.Load
    con = NewOleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=C:\Users\dell\Desktop\rdbms\telephone\telephone\telephone.accdb")
    con.Open()
    combcustno.Visible = False
    btupdate.Visible = False
    MsgBox("Connected")
EndSub

PrivateSub AddToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles AddToolStripMenuItem.Click
        combcustno.Visible = False
        tcustno.Visible = True
        btupdate.Visible = False
        cmd.Connection = con
        cmd.CommandText = "insert into tele values(@custno,@custname,
        @address,@phoneno)"
        cmd.Parameters.AddWithValue("@custno", Convert.ToInt32(tcustno.Text))
        cmd.Parameters.AddWithValue("@custname", tcustname.Text)
        cmd.Parameters.AddWithValue("@address", taddress.Text)
        cmd.Parameters.AddWithValue("@phoneno",
        Convert.ToDouble(tphoneno.Text))
        cmd.ExecuteNonQuery()
        MsgBox("Record Added")
        dr.Close()
EndSub

PrivateSub ExitToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles ExitToolStripMenuItem.Click
```

```
End
EndSub

PrivateSub ClearToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles ClearToolStripMenuItem.Click
    combcustno.Visible = False
    tcustno.Visible = True
    tcustno.Text = “”
    tcustname.Text = “”
    taddress.Text = “”
    tphoneno.Text = “”
EndSub

PrivateSub DeleteToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles DeleteToolStripMenuItem.Click
    combcustno.Visible = False
    tcustno.Visible = True
    btupdate.Visible = False
    n = Val(InputBox(“Enter the customer Number”))
    cmd.Connection = con
    cmd.CommandText = “select custno from tele”
    dr = cmd.ExecuteReader()
    cmd1.Connection = con
While (dr.Read())
If (Convert.ToInt32(dr(0)) = n) Then
        cmd1.CommandText = “delete * from tele where custno=@custno”
        cmd1.Parameters.AddWithValue(“@custno”, n)
        cmd1.ExecuteNonQuery()
        flag = 1
        MsgBox(“Record Deleted”)
```

```
EndIf
EndWhile
If flag = 0 Then
        MsgBox("Invalid Customer Number")
EndIf
      dr.Close()
EndSub

PrivateSub EditToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
          System.EventArgs) Handles EditToolStripMenuItem.Click
      combcustno.Visible = True
      tcustno.Visible = False
      btupdate.Visible = True
      cmd.Connection = con
      cmd.CommandText = "select custno from tele"
      dr = cmd.ExecuteReader()
While (dr.Read())
        combcustno.Items.Add(dr(0).ToString)
EndWhile
      dr.Close()
EndSub

PrivateSub btupdate_Click(ByVal sender As System.Object, ByVal e As
          System.EventArgs) Handles btupdate.Click

      cmd = NewOleDbCommand("update tele set custname=?,address=?,phoneno=?
          where custno=?")
      cmd.Connection = con
      cmd.Parameters.AddWithValue("@custname", Convert.ToInt32(tcustno.Text))
      cmd.Parameters.AddWithValue("@address", taddress.Text)
```

```
    cmd.Parameters.AddWithValue("@phoneno", Convert.ToDouble(tphoneno.Text))
    cmd.Parameters.AddWithValue("@custno", combcustno.SelectedItem)
    cmd.ExecuteNonQuery()
    MsgBox("Record updated")
    dr.Close()
EndSub

PrivateSub combcustno_SelectedIndexChanged(ByVal sender As System.Object,
        ByVal e As System.EventArgs) Handles combcustno.SelectedIndexChanged
EndSub

PrivateSub SearchToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles SearchToolStripMenuItem.Click
Me.Hide()
search.Show()
EndSub

PrivateSub ReportToolStripMenuItem_Click(ByVal sender As System.Object, ByVal e As
        System.EventArgs) Handles ReportToolStripMenuItem.Click
Me.Hide()
Report.Show()
EndSub

PrivateSub taddress_LostFocus(ByVal sender AsObject, ByVal e As
        System.EventArgs) Handles taddress.LostFocus
    cmd.Connection = con
    cmd.CommandText = "select max(phoneno) from tele"
    dr = cmd.ExecuteReader()
While dr.Read
      tphoneno.Text = Val(dr(0).ToString) + 1
```

```
EndWhile
    MsgBox(" Mobile No Generated")
    dr.Close()
EndSub

PrivateSub combcustno_SelectedValueChanged(ByVal sender AsObject, ByVal e As
        System.EventArgs) Handles combcustno.SelectedValueChanged
    cmd.Connection = con
    cmd.CommandText = "select * from tele where custno=@custno"
    cmd.Parameters.AddWithValue("@custno",
        Convert.ToInt32(combcustno.SelectedItem))
    dr = cmd.ExecuteReader()
While dr.Read()
        tcustno.Text = dr(0).ToString
        tcustname.Text = dr(1).ToString
        taddress.Text = dr(2).ToString
        tphoneno.Text = dr(3).ToString
EndWhile
    dr.Close()
EndSub
EndClass
```

Search form design

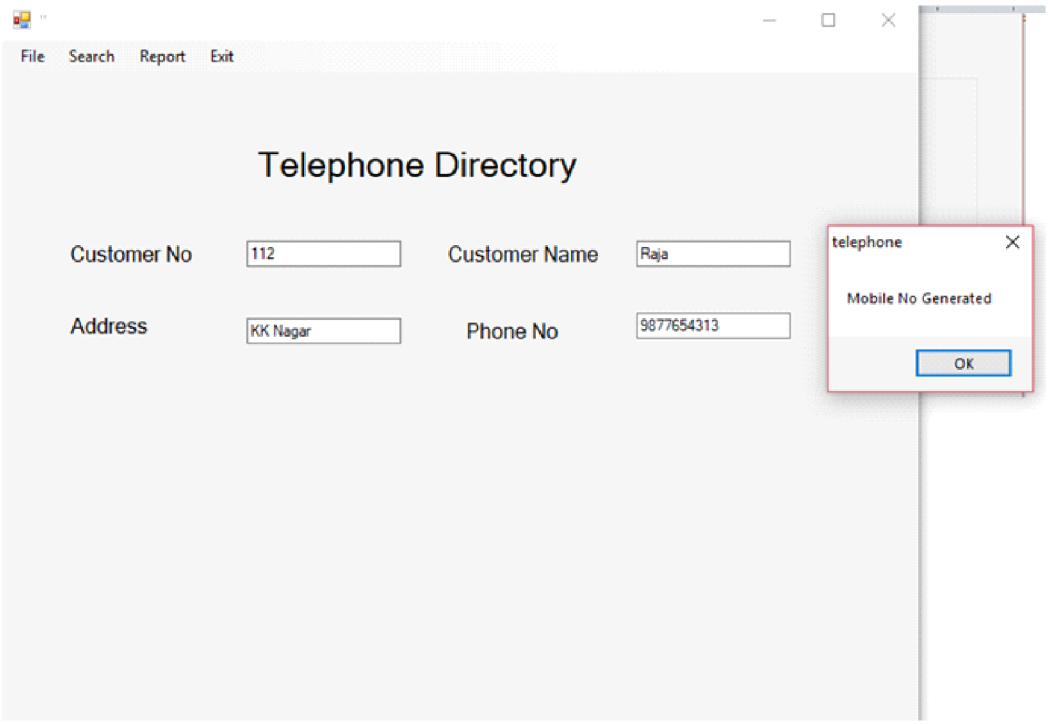
Coding

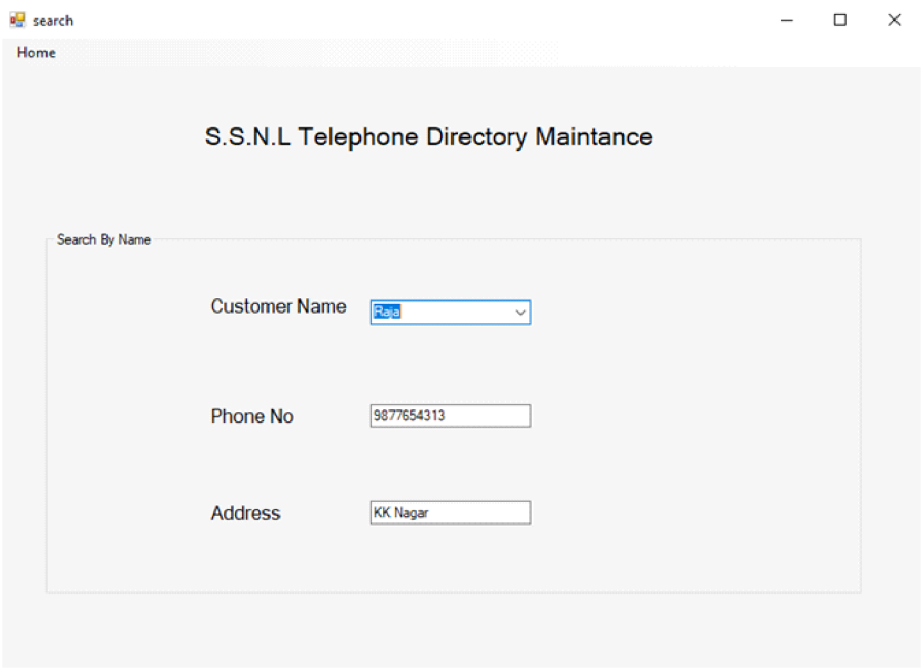
```
Imports System.Data.OleDb
PublicClasssearch
Dim con AsNewOleDbConnection
Dim n AsDouble
Dim flag AsInteger = 0

PrivateSub search_Load(ByVal sender As System.Object, ByVal e As
```

```
            System.EventArgs) HandlesMyBase.Load
        con = NewOleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
            Source=C:\Users\dell\Desktop\rdbms\telephone\telephone\telephone.accdb")
        con.Open()
    Dim dr1 AsOleDbDataReader
    Dim cmd AsNewOleDbCommand
        cmd.Connection = con
        cmd.CommandText = "select custname from tele "
        dr1 = cmd.ExecuteReader()
    While (dr1.Read())
            combcustname.Items.Add(dr1(0).ToString)
    EndWhile
        cmd.Dispose()
        dr1.Close()
    EndSub

    PrivateSub HomeToolStripMenuItem1_Click(ByVal sender As System.Object, ByVal e As
            System.EventArgs) Handles HomeToolStripMenuItem1.Click
    Me.Hide()
    Form1.Show()
    EndSub

    PrivateSub combcustname_SelectedIndexChanged(ByVal sender As System.Object,
            ByVal e As System.EventArgs) Handles
            combcustname.SelectedIndexChanged
    Dim dr AsOleDbDataReader
    Dim cmd AsNewOleDbCommand
        cmd.Connection = con
    cmd.CommandText = "select address,phoneno from tele where
            custname=@custname"
```

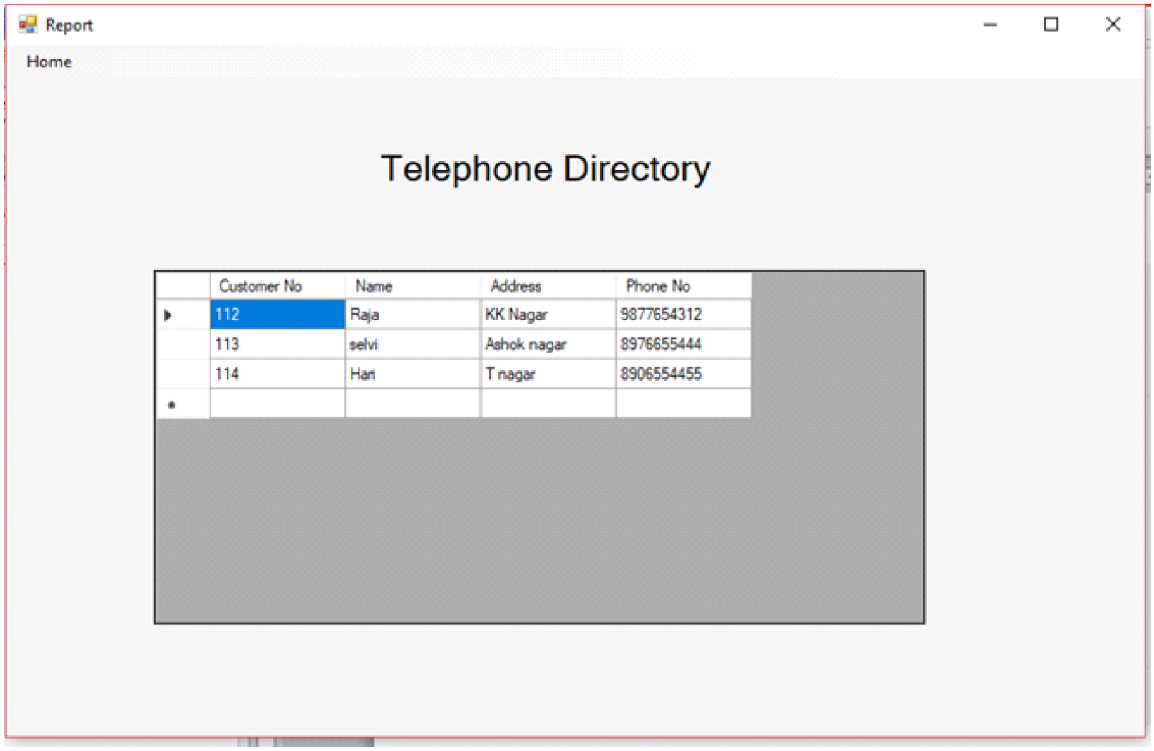
```
cmd.Parameters.AddWithValue("@custname", combcustname.SelectedItem.ToString)
        dr = cmd.ExecuteReader()
While (dr.Read())
            taddress.Text = dr(0).ToString
            tpho.Text = dr(1).ToString
EndWhile
        cmd.Dispose()
        dr.Close()
EndSub
EndClass
```

Output




search
Home
S.S.N.L Telephone Directory Maintance
Search By Name
Customer Name
Raja
Phone No
9877654313
Address
KK Nagar

Report


Report
Home
Telephone Directory
Customer No
Name
Address
Phone No
112
Raja
KK Nagar
9877654312
113
selvi
Ashok nagar
8976655444
114
Hari
T nagar
8906554455