P. A. POLYTECHNIC COLLEGE:: POLLACHI – 642002

DEPARTMENT OF COMPUTER ENGINEERING

LAB MANUAL

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DESIGNATION	: HOD
SUBJECT	: COMPONENT BASED TECHNOLOGY PRACTICAL
SUBJECT CODE	: 35257
YEAR / SEM	: III / V
SCHEME	: M

Ex No: 01 CONSOLE APPLICATION FOR CHECKING THE CASE OF THE CHARACTER

AIM:

To create a console application to accept the character from console and checking the case of character using C#

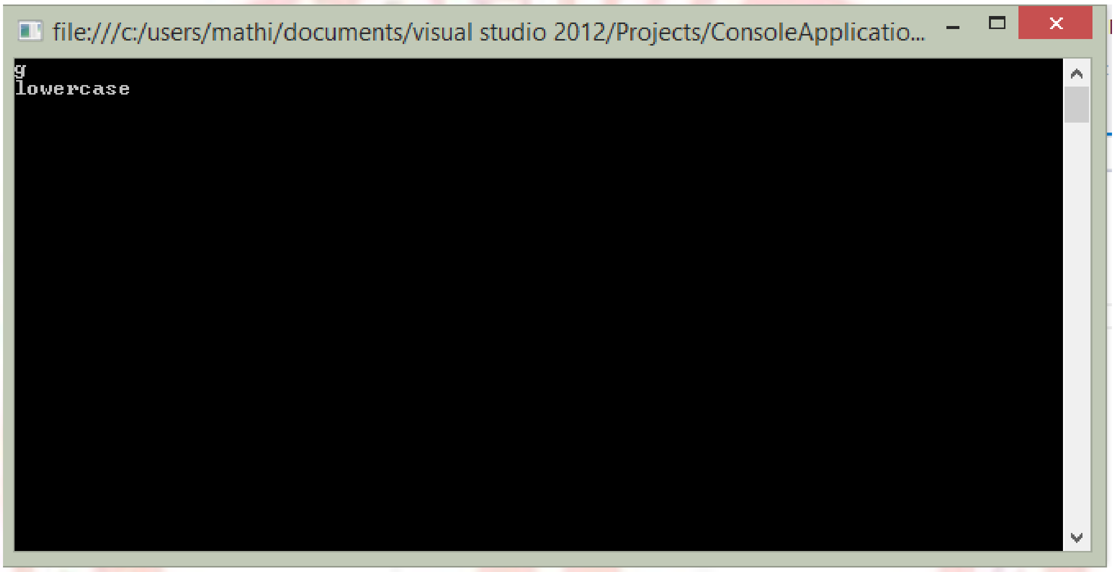
PROCEDURE:

1. Open Microsoft Visual Studio File -> New -> Project.
2. Select Project type as Visual C# -> Windows and Template type as Console Application, then click OK.

SOURCE CODE:

```
Using System;
Using System.Collections.Generic;
Using System.Text;
namespace ConsoleApplication3
{
Class Program
{
Static void Main (String[] args)
{
Char c = (char)Console.Read();
If(char.IsLetter(c))
{
If(char.IsUpper(c))
{
Console.WriteLine("\n Upper Case");
}
Else
{
Console.WriteLine("\n Lower Case");
}
}
Else
{
Console.WriteLine("\n Other Character");
}
Console.ReadKey();
}
}
}
```

OUTPUT:


file:///c:/users/mathi/documents/visual studio 2012/Projects/ConsoleApplicatio...

```
g
lowercase
```

RESULT:

Thus C# program to accept the character from keyboard and checking the case executed successfully.

Ex No: 02 C# PROGRAM FOR FINDING VOWELS

AIM:

To write a C# program to accept any character from keyboard and display whether it is a vowel or not.

PROCEDURE:

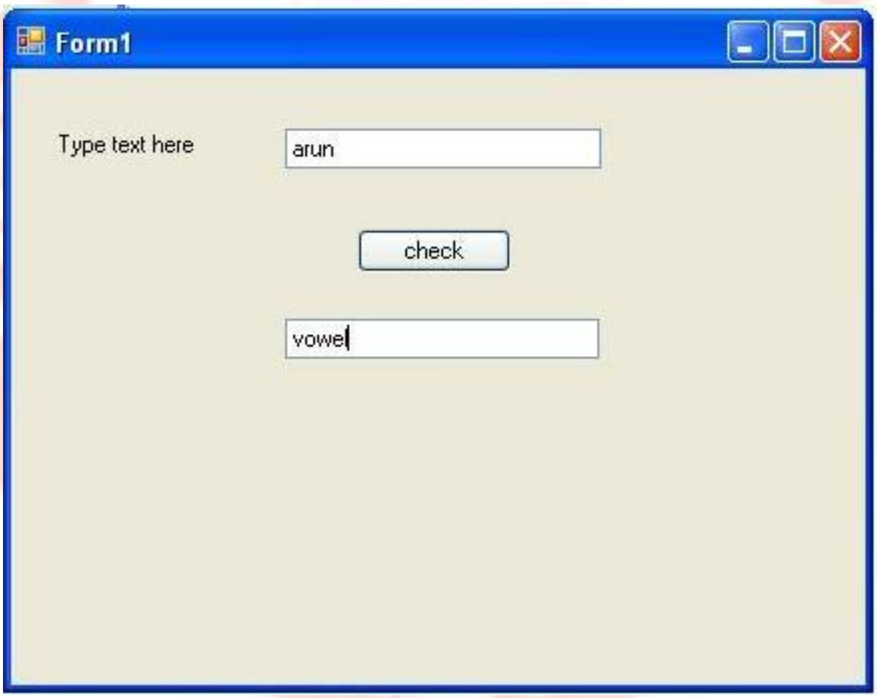
1. Open Microsoft Visual Studio File->New->Project.
2. Select Project type as Visual C# -> Windows and Template type as windows application, then click OK.

SOURCE CODE:

Form1.cs

```
Using System;
Using System.Collections.Generic;
Using System.ComponentModel;
Using System.Data;
Using System.Drawing;
Using System.linq;
Using System.Text;
Using System.Windows.Forms;
namespace WindowsFormsApplication1
{
Public partial class Form1:Form
{
Public Form1()
{
InitializeComponent();
}
Private void button1_Click(object sender, EventArgs c)
{
If(textBox1.Text==”a”|| textBox1.Text==”e”|| textBox1.Text==”i”||
textBox1.Text==”o”|| textBox1.Text==”u”|| textBox1.Text==”A”||
textBox1.Text==”E”|| textBox1.Text==”I”|| textBox1.Text==”O”||
textBox1.Text==”U”)
{
textBox2.Text=”Vowel”;
}
Else
{
textBox2.Text=”Not Vowel”;
}
}
}
}
```

OUTPUT:



arun

vowel

RESULT:

Thus the C# program for checking vowels created and execute successfully.

Ex No: 03 C# PROGRAM FOR CASE CONVERSION

AIM:

To write a C# program to accept a string and convert the case of the Characters.

PROCEDURE:

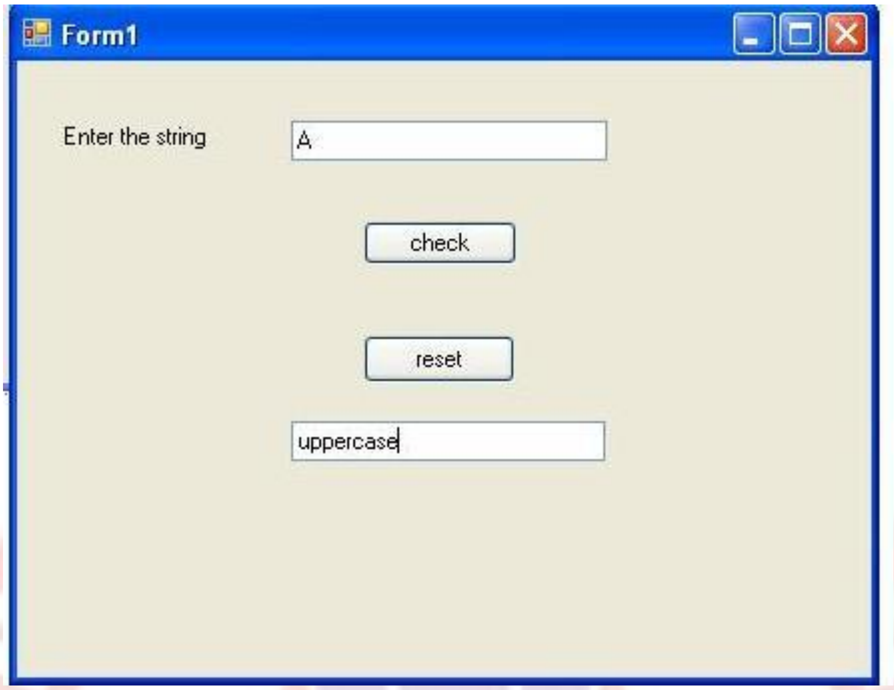
1. Open Microsoft Visual Studio File-> New -> Project.
2. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.

SOURCE CODE:

Form1.cs

```
Using System;
Using System.Collections.Generic;
Using System.ComponentModel;
Using System.Data;
Using System.Drawing;
Using System.linq;
Using System.Text;
Using System.Windows.Forms;
namespace WindowsFormsApplication1
{
Public partial class Form1:Form
{
Public Form1()
{
InitializeComponent();
}
Private void button1_Click(object sender, EventArgs c)
{
Char c1;
String s,c;
Int len v;
s=textBox1.Text;
len=s.Length;
For(int i=0; I<= len-1; I++)
{
c= s.Substring(i,1);
c1=char.Parse(c);
v=(int)c1;
Console.Write("v");
If(((int)c1>96)&&((int)c1<123)
{
textBox2.Text=""+v;
textBox2.text=textBox1.Text.ToUpper();
}
Else
{
textBox2.Text=""+v;
textBox2.text=textBox1.Text.ToLower();
}
}
}
Private void button2_click(object sender, EventArgs e)
{
textBox1.Clear();
textBox2.Clear();
}
}
}
```

OUTPUT:



A

uppercase

RESULT:

Thus the C# program to accept the character from the keyboard and checking the case of the character as string created and executed successfully

Ex No: 04 C#.NET PROGRAM FOR TEXT EDITOR

AIM

To develop a menu based application to implement a text editor with cut, copy, paste, save and close operations using C#.

PROCEDURE:

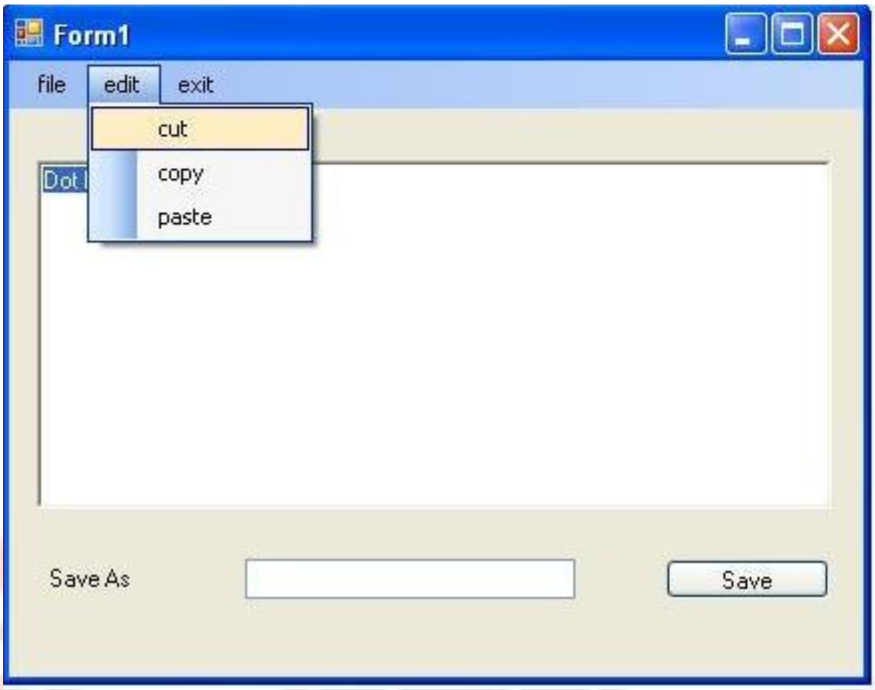
1. Open Microsoft Visual Studio File-> New -> Project.
2. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.

SOURCE CODE:

```
Using System;
Using System.Collections.Generic;
Using System.ComponentModel;
Using System.Data;
Using System.Drawing;
Using System.linq;
Using System.Text;
Using System.Windows.Forms;
namespace WindowsFormsApplication1
{
Public partial class Form1:Form
{
Public Form1()
{
InitializeComponent();
}
Private void Form1_Load(object sender, EventArgs e)
{
Label1.Visible=false;
textBox1.Visible=false;
Button1.Visible=false;
}
```

```
Private void newToolStripMenuItem_Click(object sender, EventArgs e)
{
richTextBox1.Clear();
}
Private void saveToolStripMenuItem_Click(object sender, EventArgs e)
{
Label1.Visible=true;
textBox1.Visible=true;
Button1.Visible=true;
}
Private void closeToolStripMenuItem_Click(object sender, EventArgs e)
{
richTextBox1.Clear();
}
Private void cutToolStripMenuItem_Click(object sender, EventArgs e)
{
richTextBox1.Cur();
}
Private void copyToolStripMenuItem_Click(object sender, EventArgs e)
{
richTextBox1.Copy();
}
Private void pasteToolStripMenuItem_Click(object sender, EventArgs e)
{
richTextBox1.Paste();
}
Private void buton1_Click(object sender, EventArgs e)
{
richTextBox1.SaveFile(textBox1.Text);
}
```

OUTPUT:



RESULT:

Thus the C# program to implement a text editor is created and executed successfully.

Ex No: 05 C#.NET APPLICATION FOR CALCULATER

AIM:

To write a C# program to implement a calculator with memory and recall operation

PROCEDURE

1. Open Microsoft Visual Studio File-> New -> Project.

2. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.

SOURCE CODE:

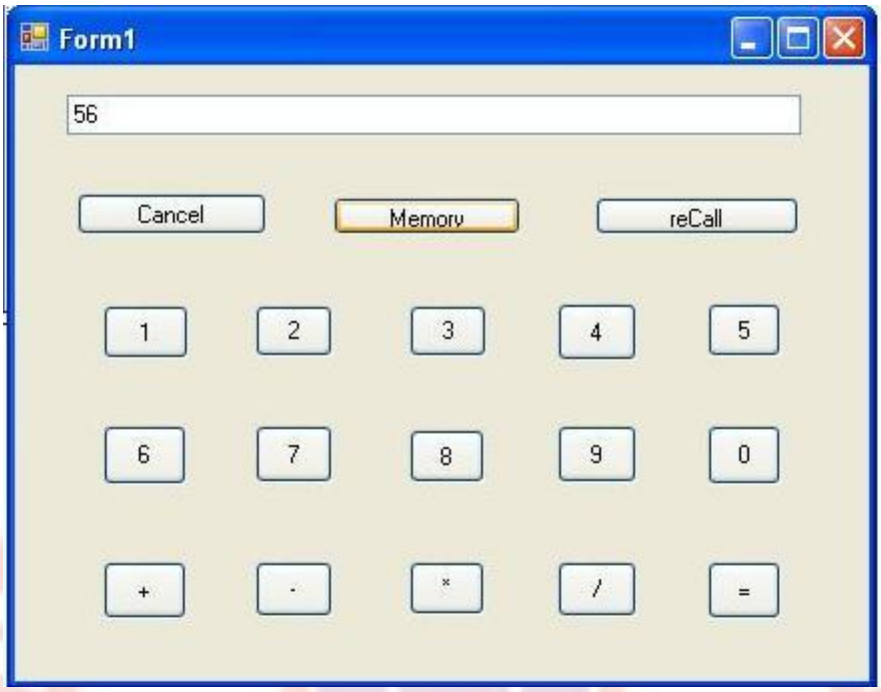
```
Using System;
Using System.Collections.Generic;
Using System.ComponentModel;
Using System.Data;
Using System.Drawing;
Using System.linq;
Using System.Text;
Using System.Windows.Forms;
namespace WindowsFormsApplication1
{
Public partial class Form1:Form
{
Int b, n, d, f;
String op;
Public Form1()
{
InitializeComponent();
}
Private void Form1_Load(object sender, EventArgs e)
{
}
Private void button1_Click(object sender, EventArgs e)
{
```

```
textBox1.Clear();
}
Private void button2_Click(object sender, EventArgs e)
{
n=int.Parse(textBox1.Text);
textBox1.Clear();
}
Private void button3_Click(object sender, EventArgs e)
{
textBox1.Text=””+n;
}
Private void button4_Click(object sender, EventArgs e)
{
textBox1.AppendText(“1”);
}
Private void button5_Click(object sender, EventArgs e)
{
textBox1.AppendText(“2”);
}
Private void button6_Click(object sender, EventArgs e)
{
textBox1.AppendText(“3”);
}
Private void button7_Click(object sender, EventArgs e)
{
textBox1.AppendText(“4”);
}
Private void button8_Click(object sender, EventArgs e)
{
textBox1.AppendText(“5”);
}
Private void button9_Click(object sender, EventArgs e)
{
textBox1.AppendText(“6”);
```

```
}
Private void button10_Click(object sender, EventArgs e)
{
textBox1.AppendText(“7”);
}
Private void button11_Click(object sender, EventArgs e)
{
textBox1.AppendText(“8”);
}
Private void button12_Click(object sender, EventArgs e)
{
textBox1.AppendText(“9”);
}
Private void button13_Click(object sender, EventArgs e)
{
textBox1.AppendText(“0”);
}
Private void button14_Click(object sender, EventArgs e)
{
b=int.Parse(textBox1.Text);
Op=”+”;
textBox1.Clear();
}
Private void button15_Click(object sender, EventArgs e)
{
b=int.Parse(textBox1.Text);
Op=”-”;
textBox1.Clear();
}
Private void button16_Click(object sender, EventArgs e)
{
b=int.Parse(textBox1.Text);
Op=”*”;
textBox1.Clear();
```

```
}
Private void button17_Click(object sender, EventArgs e)
{
b=int.Parse(textBox1.Text);
Op=”/”;
textBox1.Clear();
}
Private void button18_Click(object sender, EventArgs e)
{
d=int.Parse(textBox1.Text);
Switch(op)
{
case “+”;
f=b+d;
textBox1.Text=””+f;
Break;
case “-”;
f=b-d;
textBox1.Text=””+f;
Break;
case “*”;
f=b*d;
textBox1.Text=””+f;
Break;
case “/”;
f=b/d;
textBox1.Text=””+f;
Break;
}
}
}
}
```

OUTPUT:



RESULT:

Thus the C# program to implement calculator with memory and recall operation has completed and executed successfully.

Ex No: 06 C#.NET PROGRAM FOR DATE TIME PICKER

AIM:

To write a C# program to display day, month, and year by picking a day in Date Time Picker.

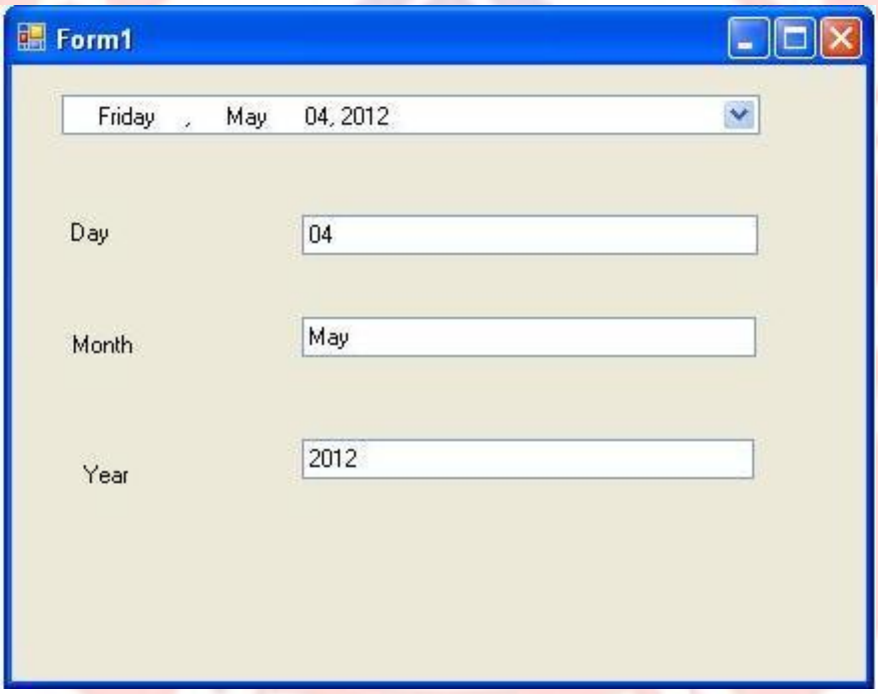
PROCEDURE

1. Open Microsoft Visual Studio File-> New -> Project.
2. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.

SOURCE CODE:

```
Using System;
Using System.Collections.Generic;
Using System.ComponentModel;
Using System.Data;
Using System.Drawing;
Using System.linq;
Using System.Text;
Using System.Windows.Forms;
namespace WindowsFormsApplication1
{
Public partial class Form1:Form
{
Public Form1()
{
InitializeComponent();
}
Private void Form1_Load(object sender, EventArgs e)
{
textBox1.Text=””+dateTimePicker1.Value.Day;
textBox2.Text=””+dateTimePicker1.Value.Month;
textBox3.Text=””+dateTimePicker1.Value.Year;
}
Private void dateTimePicker1_ValueChanged(object sender, EventArgs e)
{
textBox1.Text=""+dateTimePicker1.Value.Day;
textBox2.Text=""+dateTimePicker1.Value.Month;
textBox3.Text=""+dateTimePicker1.Value.Year;
}
}
}
```

OUTPUT:



Friday , May 04, 2012

Day 04

Month May

Year 2012

RESULT:

Thus a C# program to display day, month, year using DateTimePicker has created and executed successfully

Ex No: 07 C#.NET PROGRAM FOR TIMER BASED QUIZ APPLICATION

AIM:

To develop a c# application to perform timer based quiz of 10 questions using C#.

PROCEDURE

1. Open Microsoft Visual Studio File-> New -> Project.

2. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.

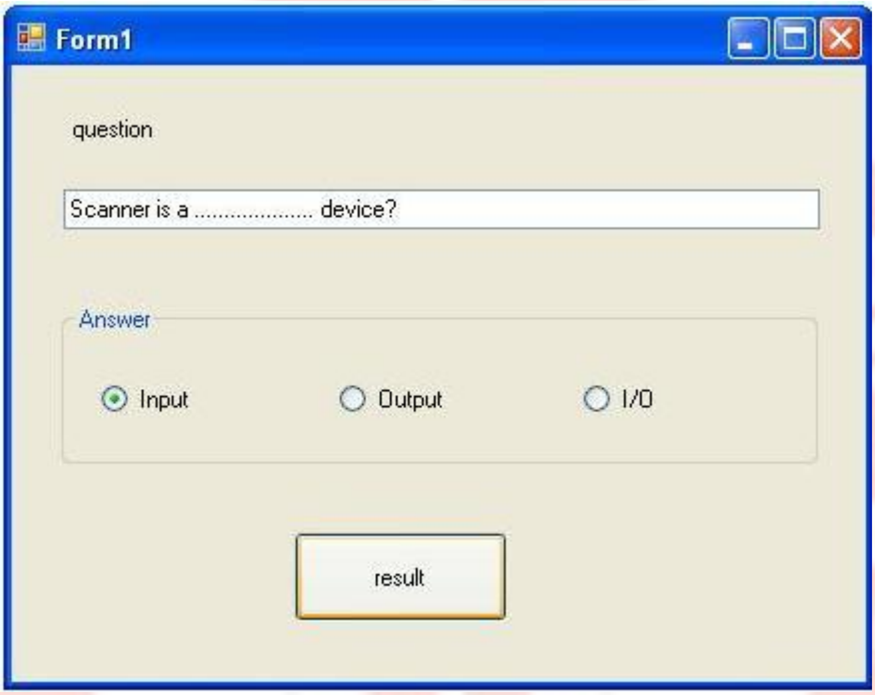
SOURCE CODE:

```
Using System;
Using System.Collections.Generic;
Using System.ComponentModel;
Using System.Data;
Using System.Drawing;
Using System.linq;
Using System.Text;
Using System.Windows.Forms;
namespace WindowsFormsApplication1
{
Public partial class Form1:Form
{
String[,]Quest=new string[5,4];
String[,]Ans=new string[5,2];
int i= -1;
Public Form1()
{
InitializeComponent();
}
Private void Form1_Load(object sender, EventArgs e)
{
Quest[0,0]=”in……………..india won cricket world cup”;
```

```
Quest[0,1]=”1973”;
Quest[0,2]=”1983”;
Quest[0,3]=”1987”
Quest[1,0]=”scanner is ………….. device”;
Quest[1,1]=”input”;
Quest[1,2]=”ouput”;
Quest[1,3]=”I/O”;
Quest[2,0]=”which one of the following is a browser?”;
Quest[2,1]=”visual basic”;
Quest[2,2]=”java”;
Quest[2,3]=”chrome”;
Quest[3,0]=”………… was not a chief minister”;
Quest[3,1]=”kamarajar”;
Quest[3,2]=”sivaji”;
Quest[3,3]=”MGR”;
Quest[4,0]=”tsunami hits india on ………..”;
Quest[4,1]=”DEC 24,2006”
Quest[4,2]=”DEC 24,2004”;
Quest[4,3]=”DEC 26,2006”;
Ans[0,0]=”1983”;
Ans[0,0]=”input”;
Ans[0,0]=”chrome”;
Ans[0,0]=”sivaji”;
Ans[0,0]=”DEC 4,2004”;
Timer1.Enabled=true;
Button1.Enabled=false;
}
Private void timer1_Tick(object sender, EventArgs e)
{
i=i + 1;
If(i==5)
{
Timer1.Enabled=false;
Button1.Enabled=true;
}
Else
{
radioButton1.Checked=false;
radioButton2.Checked=false;
radioButton3.Checked=false;
textBox1.Text=Quest[i,0];
radioButton1.Text=Quest[i,1];
radioButton2.Text=Quest[i,2];
radioButton3.Text=Quest[i,3];
}
}
Private void radioButton1_CheckedChanged(object sender, EventArgs e)
{
Ans[i,1]=radioButton1.Text;
}
Private void radioButton2_CheckedChanged(object sender, EventArgs e)
{
Ans[i,1]=radioButton2.Text;
}
Private void radioButton3_CheckedChanged(object sender, EventArgs e)
{
Ans[i,1]=radioButton3.Text;
}
Private void button1_Clickobject sender, EventArgs e)
{
Int count=0;
For(int j=0; j<=4; j++)
{
If(Ans[j,0]==Ans[j,1])
{
Count+=1;
}
}
```

```
MessageBox.Show("you have scored"+count+"marks");
}
}
}
```

OUTPUT:



Scanner is a .... device?

● Input ○ Output ○ I/O

RESULT:

Thus a C# program for timer based quiz application has created and executed successfully.

Ex No: 08 C# APPLICATION USING FILE AND DIRECTORY CONTROL TO IMPLEMENT THE COMMON DIALOG BOX

AIM:

To develop the application using the file and directory control to implement the common dialog box using C#

PROCEDURE

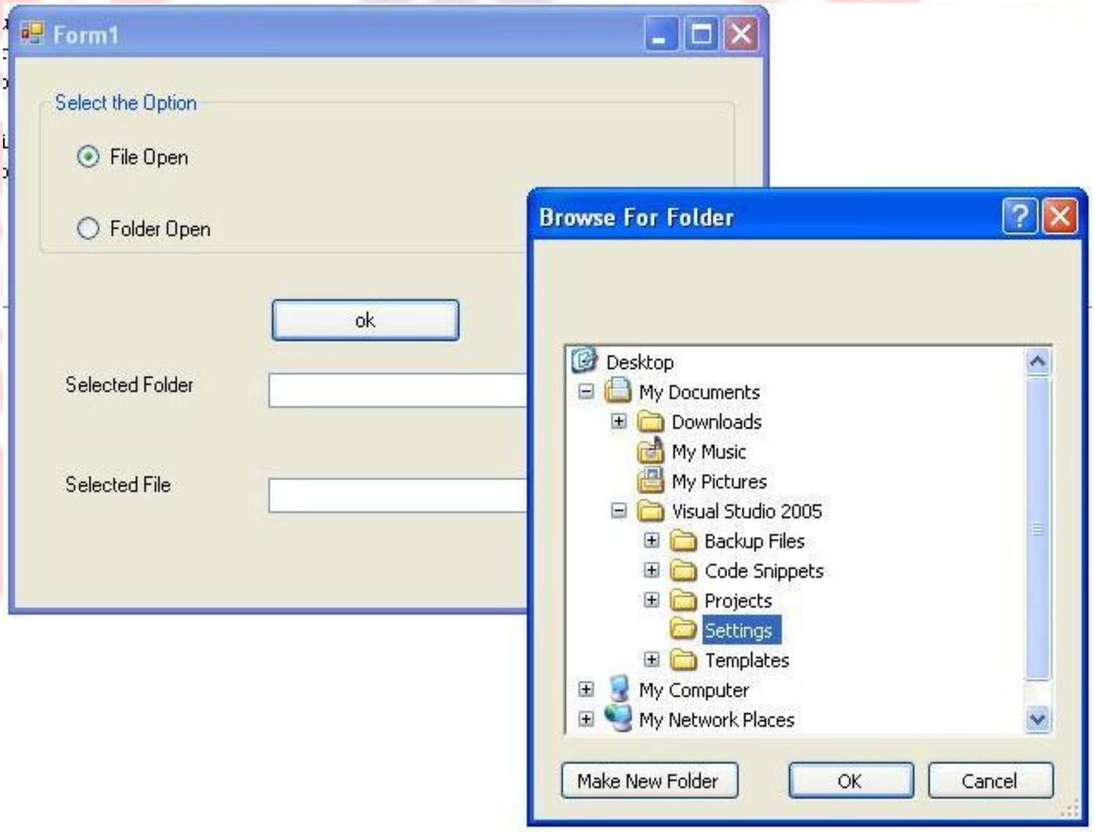
1. Open Microsoft Visual Studio File-> New -> Project.

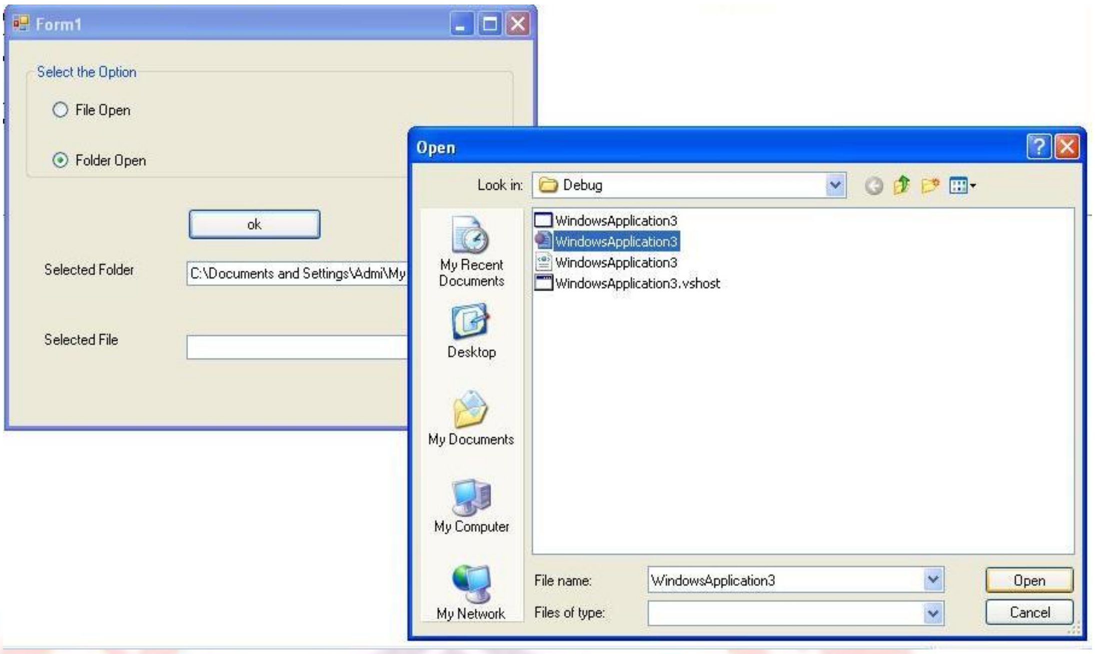
2. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.

SOURCE CODE:

```
Using System;
Using System.Collections.Generic;
Using System.ComponentModel;
Using System.Data;
Using System.Drawing;
Using System.linq;
Using System.Text;
Using System.Windows.Forms;
Namespace WindowsFormsApplication1
{
Public partial class Form1:Form
{
Public Form1()
{
initializeComponent();
}
Private void button1_Click(object sender, EventArgs e)
{
If(radioButton.Checked)
{
folderBrowserDialog1.ShowDialog();
textBox.Text=folderBrowserDialog1.SelectedPath;
}
Else
{
openFileDialog1.ShowDialog();
textBox2.Text=openFileDialog1.FileName;
}
}
}
}
```

OUTPUT:



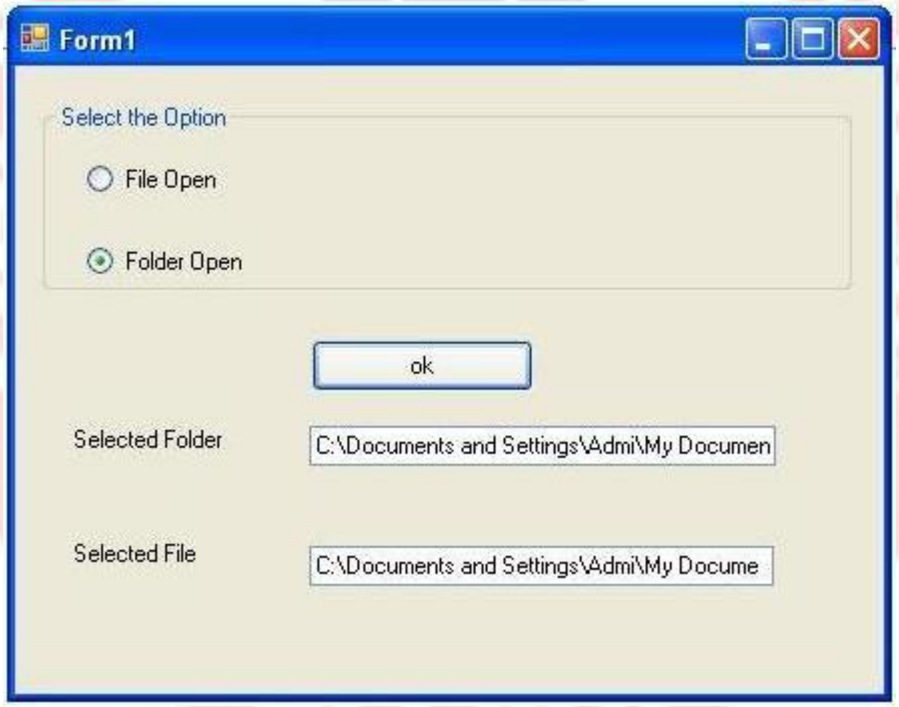


Selected Folder: C:\Documents and Settings\Admi\My

Selected File:

File name: WindowsApplication3

Files of type:



Selected Folder: C:\Documents and Settings\Admi\My Documen

Selected File: C:\Documents and Settings\Admi\My Docume

RESULT:

Thus the application using file and directory control to implement the common dialog box program has been executed successfully.

Ex No: 09 ADO.NET APPLICATION FOR STUDENT DATABASE

AIM:

To develop a database application to store the details of students using ADO.NET.

PROCEDURE:

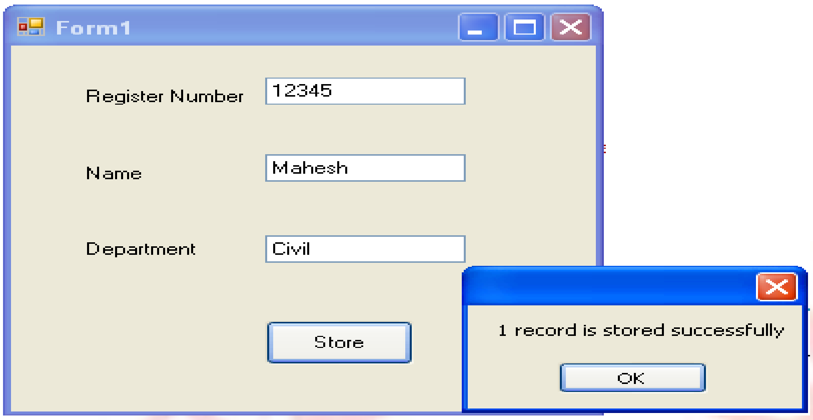
1. Open Microsoft Visual Studio -> Create a table and database in Server Explorer window.
2. In the table create appropriate column name and data type and insert the data in table.
3. Open Microsoft Visual Studio File-> New -> Project.
4. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.
5. Design controls on a form1, write event procedures and run the application.

SOURCE CODE:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Text;
using System.Windows.Forms;
using System.Data.SqlClient;
namespace exx9
{
    public partial class Form1 : Form
    {
        public SqlConnection con;
        public SqlCommand com;
        public Form1()
        {
            InitializeComponent();
        }
        private void Form1_Load(object sender, EventArgs e)
        {
            //con = new SqlConnection("data sorce=localhost/sqlexpress; initial
            catalog=studen; persist security info=True; Integrated Security=SSPI;");
            con= new SqlConnection("Server=PA-2259BF176D4D; database=studen;
            uid=sa; pwd=sa");
            com = new SqlCommand();
            com.Connection = con;
            con.Open();
        }
        private void button1_Click(object sender, EventArgs e)
        {

            if (textBox1.Text == ("") || textBox2.Text == ("") || textBox3.Text == (""))
        {
        MessageBox.Show("Please fill all details");
        }
        else
        {
        com.CommandText="insert into stu values('" +textBox1.Text+ "','"
+textBox2.Text+ "','" +textBox3.Text+ "')";
        com.ExecuteNonQuery();
        MessageBox.Show("1 record is stored successfully");
        textBox1.Clear();
        textBox2.Clear();
        textBox3.Clear();

        }
    }


}
```

}

OUTPUT:

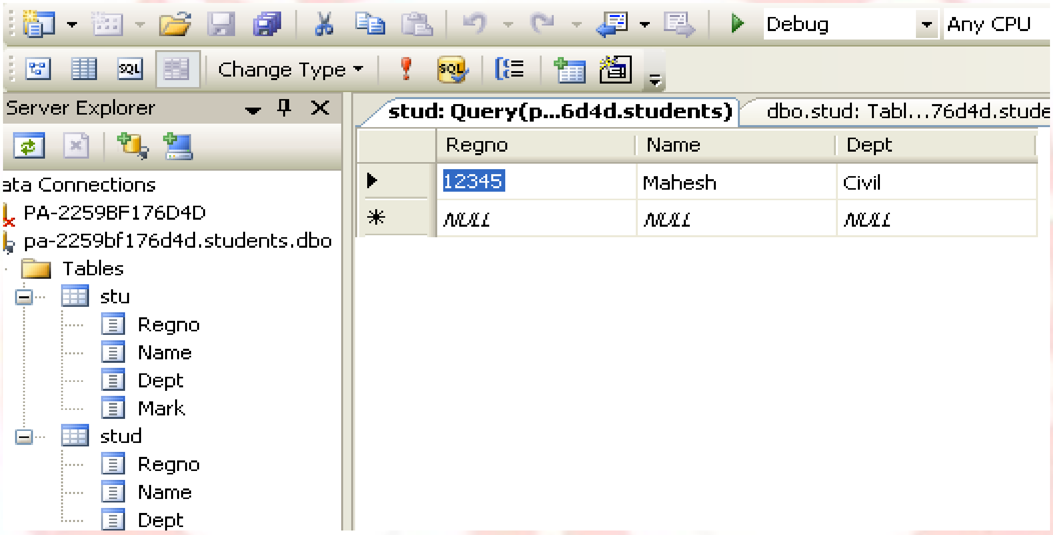


Register Number 12345

Name Mahesh

Department Civil

1 record is stored successfully



```
ata Connections
PA-2259BF176D4D
pa-2259bf176d4d.students.dbo
Tables
stu
    Regno
    Name
    Dept
    Mark
stud
    Regno
    Name
    Dept
```

	Regno	Name	Dept
▶	12345	Mahesh	Civil
✳	NULL	NULL	NULL

RESULT:

Thus the ADO.NET program to store student details is created and executed successfully.

Ex No: 10 ADO.NET PROGRAM FOR INSERTION DELETION AND UPDATION

AIM:

To write an ADO.NET program for insertion, deletion and updating in student database

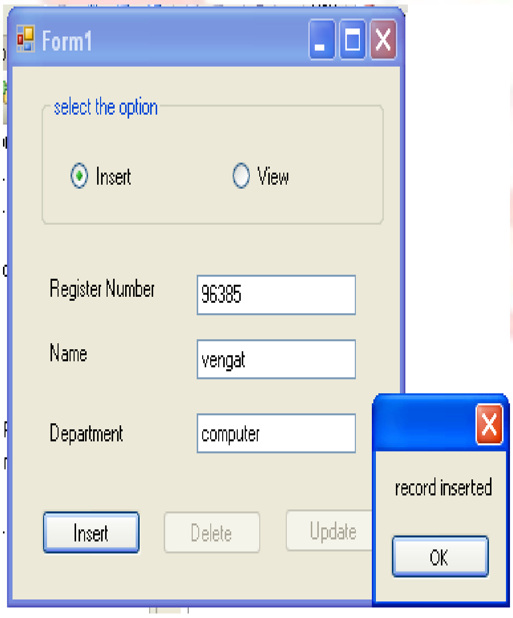
PROCEDURE:

1. Open Microsoft Visual Studio -> Create a table and database in Server Explorer window.
2. In the table create appropriate column name and data type and insert the data in table.
3. Open Microsoft Visual Studio File-> New -> Project.
4. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.
5. Design controls on a form1, write event procedures and run the application.

SOURCE CODE:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Text;
using System.Windows.Forms;
using System.Data.SqlClient;

namespace WindowsApplication15
{
    public partial class Form1 : Form
    {
        public SqlConnection con;
        public SqlCommand com;
        public SqlDataReader rd;
        public Form1()
        {
            InitializeComponent();
        }

        private void Form1_Load(object sender, EventArgs e)
        {
        con = new SqlConnection("data source=pa-2259bf176d4d;initial
catalog=students; persist security info=True; Integrated Security=SSPI;");
        //while using sql query analyzer/ Con= new
SqlConnection(“Server=localhost;database=student;uid=sa;pwd=”);
        com=new SqlCommand();
        com.Connection=con;
        con.Open();
        }
        private void radioButton1_CheckedChanged(object sender, EventArgs e)
        {
            textBox1.Clear();
            textBox2.Clear();
            textBox3.Clear();
            comboBox1.Visible = false;
            button1.Enabled = true;
            button2.Enabled = false;
            button3.Enabled = false;
        }
        private void radioButton2_CheckedChanged(object sender, EventArgs e)
        {
            comboBox1.Items.Clear();
            button1.Enabled=false;
            button2.Enabled=true;
            button3.Enabled=true;
            comboBox1.Visible=true;
            com.CommandText="select*from stu";
            rd=com.ExecuteReader();
            while(rd.Read())
            {
            comboBox1.Items.Add(rd.GetString(0));
            }
            rd.Close();
        }
        private void comboBox1_SelectedIndexChanged(object sender, EventArgs e)
        {
        com.CommandText="select * from stu where
regno=('"+comboBox1.SelectedItem+"')";
        rd=com.ExecuteReader();
        if(rd.Read())
        {
        textBox2.Text=rd.GetString(1);
        textBox3.Text=rd.GetString(2);
        }
        rd.Close();
        }
        private void button1_Click(object sender, EventArgs e)
        {
            if(textBox1.Text==""||textBox2.Text==""||textBox3.Text=="")
            {
                MessageBox.Show("Please fill all details");
            }
            else
            {
            com.CommandText="insert into stu
values('"+textBox1.Text+"','"+textBox2.Text+"','"+textBox3.Text+"')";
            com.ExecuteNonQuery();
            MessageBox.Show("record inserted");
            }
        }
        private void button2_Click(object sender, EventArgs e)
        {
            com.CommandText="delete from stu where
regno="+comboBox1.SelectedItem+"";
            rd=com.ExecuteReader();
            comboBox1.Items.Remove(comboBox1.SelectedItem);
            textBox2.Clear();
            textBox3.Clear();
            MessageBox.Show("record deleted");
        }
        private void button3_Click(object sender, EventArgs e)
        {
            com.CommandText="update stu set
name='"+textBox2.Text+"',dept='"+textBox3.Text+"' where
regno='"+comboBox1.SelectedItem+"'";
            com.ExecuteNonQuery();
            MessageBox.Show("record updated");
        }
    }
}
```

OUTPUT:



Form1

select the option

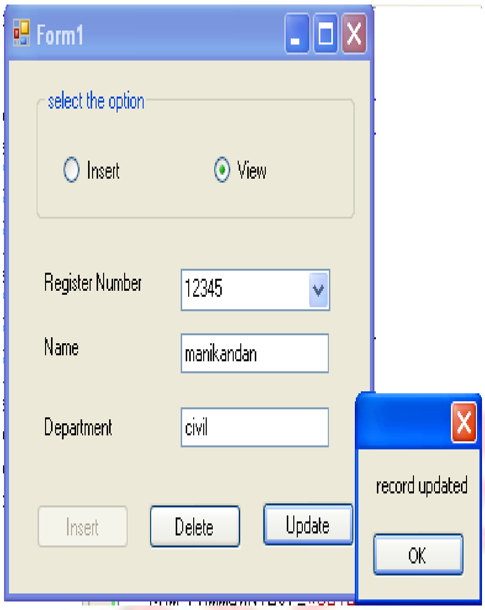
● Insert ○ View

Register Number: 96385

Name: vengat

Department: computer

record inserted



select the option

○ Insert ● View

Register Number 12345

Name manikandan

Department civil

record updated

RESULT:

Thus an ADO.NET program for insertion, deletion and Updating is created and executed successfully.

Ex No: 11 ADO.NET APPLICATION WITH DATA GRID

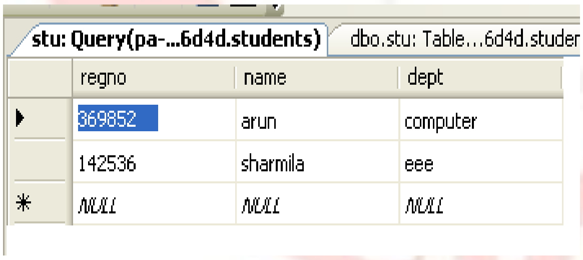
AIM:

To develop a application using Datagrid to Display records.

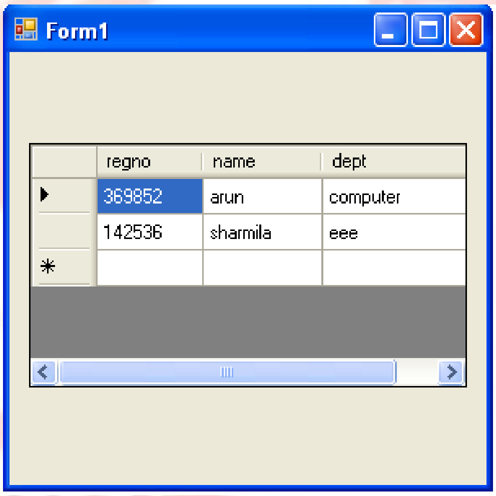
PROCEDURE:

1. Open Microsoft Visual Studio -> Create a table and database in Server Explorer window.
2. In the table create appropriate column name and data type and insert the data in table.
3. Open Microsoft Visual Studio File-> New -> Project.
4. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.
5. Design Data Grid View controls on a form1 and select arrow symbol Data Grid View control.
6. In the Data Grid View task, click choose data source drop down list box.
7. Click add project data source, choose a data source type and click next.
8. In the dataset model, choose the dataset and click next, again click next.
9. Chose the table and click finish.
10. Run the application

OUTPUT:



	regno	name	dept
▶	369852	arun	computer
	142536	sharmila	eee
*	NULL	NULL	NULL



	regno	name	dept
▶	369852	arun	computer
	142536	sharmila	eee
*			

RESULT:

Thus the ADO.NET application for access data using data grid is completed and executed successfully.

Ex No: 12 DATA GRID APPLICATION WITH INSERTION AND UPDATION

AIM:

To create a application using datagrid to add, edit, and modify records**.**

PROCEDURE:

1. Create a table stud in a sql server database student (using SQL Query Analyzer).
2. Execute the following commands

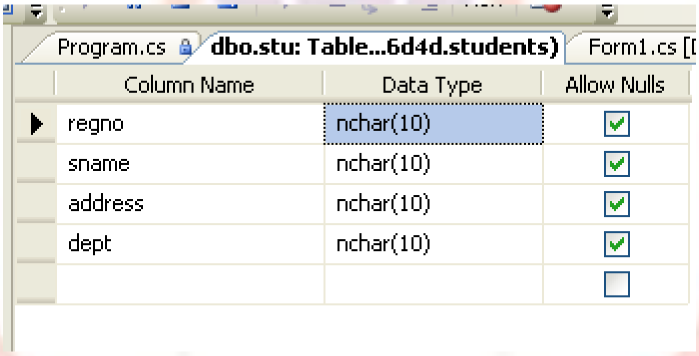
```
Create database student
Use student
Create table stud (regno varchar(10), name varchar(10), dept varchar(10))
```

3. Open Microsoft Visual Studio File-> New -> Project.
4. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.

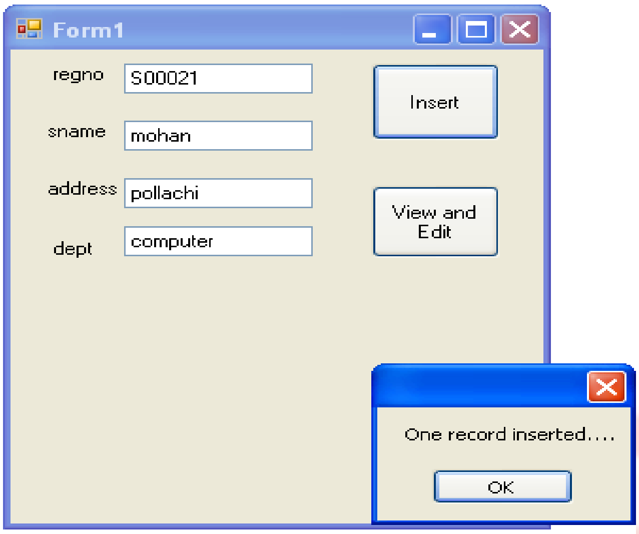
SOURCE CODE:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;
using System.Data.SqlClient;
namespace ex12
{
    public partial class Form1 : Form
    {
        SqlCommand com = new SqlCommand();
        SqlConnection con = new SqlConnection("Data Source=LAB2-36;Initial
Catalog=student;Integrated Security=True");
        SqlDataReader rd;
        int n;
        public Form1()
        {
            InitializeComponent();
        }
        private void Form1_Load(object sender, EventArgs e)
        {
            com.Connection = con;
            con.Open();
        }
        private void dataGridView1_CellContentClick(object sender, DataGridViewCellEventArgs e)
        {
            com.CommandText="update studs set sname='"+dataGridView1.CurrentRow.Cells[1].Value+"',address='"+dataGridView1.CurrentRow.Cells[2].Value+"',dept='"+dataGridView1.CurrentRow.Cells[3].Value+"' where regno='"+dataGridView1.CurrentRow.Cells[0].Value+"'";
            com.ExecuteNonQuery();
            MessageBox.Show("One record updated....");
            SqlDataAdapter da1=new  SqlDataAdapter("select * from studs",con);
            DataSet ds1=new DataSet();
            da1.Fill(ds1,"studs");
            dataGridView1.DataSource=ds1.Tables["studs"];
        }
        private void button1_Click(object sender, EventArgs e)
        {
            dataGridView1.Visible=false;
            com.CommandText="select count(*) from studs";
            n=(Int32)com.ExecuteScalar();
            textBox1.Text="S000"+n+1;
            com.CommandText="insert into studs values('"+textBox1.Text+"','"+textBox2.Text+"','"+textBox3.Text+"','"+textBox4.Text+"')";
            com.ExecuteNonQuery();
            MessageBox.Show("One record inserted....");
        }
        private void button2_Click(object sender, EventArgs e)
        {
            dataGridView1.Visible=true;
            SqlDataAdapter da=new SqlDataAdapter("select * from studs",con);
                DataSet ds=new DataSet();
            da.Fill(ds,"studs");
            dataGridView1.DataSource=ds.Tables["studs"];
        }
    }
}
```

OUTPUT:



Column Name	Data Type	Allow Nulls
regno	nchar(10)	☑
sname	nchar(10)	☑
address	nchar(10)	☑
dept	nchar(10)	☑
		□



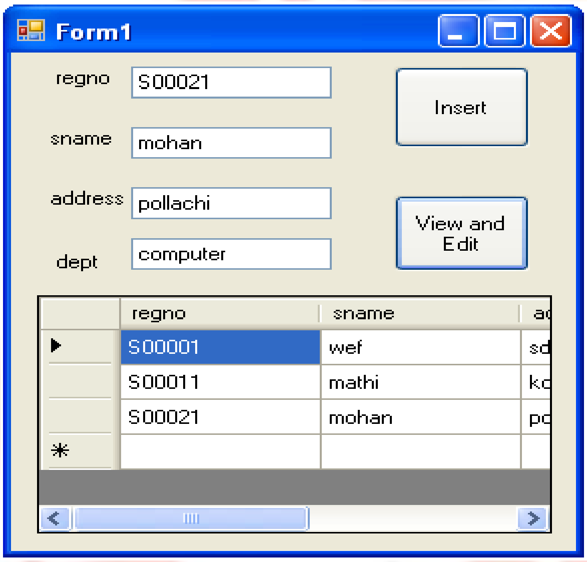
regno S00021

sname mohan

address pollachi

dept computer

One record inserted....



regno S00021

sname mohan

address pollachi

dept computer

	regno	sname	ad
▶	S00001	wef	sd
	S00011	mathi	kc
	S00021	mohan	pc
*			

RESULT:

Thus the ADO.NET with data grid has been implemented for insertion and Updating operation.

Ex No: 1 READ THE DETAILS OF THE SELECTED COUNTRY

AIM:

To develop a application to read the details of the selected country stored in a XML database and display back to the user.

PROCEDURE:

1. Open Microsoft Visual Studio File-> New -> Project.
2. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.
3. On Project menu click Add New Item -> then click XML file option -> enter the XML filename as countries.xml.
4. On Form1 add one button and set name as Display country for button1.
5. On Form1 add a dataset control and select untyped dataset option and click ok.
6. Enter the code for button1 and button2 .
7. Run the application.

SOURCE CODE:

Countries.xml

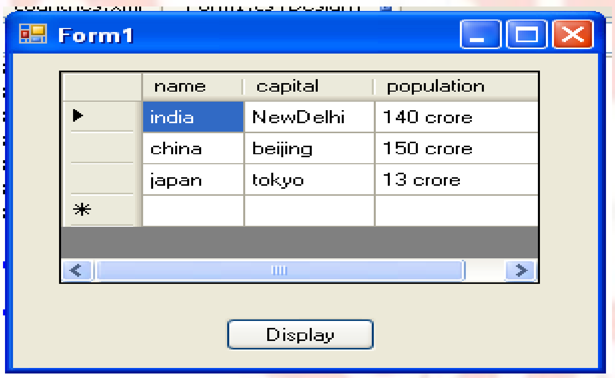
```
<?xml version="1.0" encoding="utf-8" ?>
<countries>
  <country name="india" capital="NewDelhi" population="140 crore"/>
  <country name="china" capital="beijing" population="150 crore"/>
  <country name="japan" capital="tokyo" population="13 crore"/>
</countries>
```

Click event of buton1:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Text;
using System.Windows.Forms;
```

```
namespace country
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }
        private void Display_Click(object sender, EventArgs e)
        {
            DataSet dataset = new DataSet();
            dataset.ReadXml(@"C:\Documents and Settings\cse\My Documents\Visual
Studio 2005\Projects\country\country\countries.xml");
            dataGridView1.DataSource = dataset.Tables[0];
        }
    }
}
```

OUTPUT:



name	capital	population
india	NewDelhi	140 crore
china	beijing	150 crore
japan	tokyo	13 crore

RESULT:

Thus the xml database was created and executed successfully.

Ex No: 2 READ STUDENT DATA FROM XML DOCUMENTAND DISPLAY

AIM:

To develop a application to read an xml document containing subject, marks scored, year of passing into a dataset.

PROCEDURE:

1. Open Microsoft Visual Studio File-> New -> Project.

2. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.

3. On Project menu click Add New Item -> then click XML file option -> enter the XML filename as student.xml.

4. On Form1 add button 1 and DataGridView and set name as show student details for button 1. 5. On Form1 add a dataset control and select untyped dataset option and click ok.

6. Enter the code for button1.

7. Run the application.

SOURCE CODE:

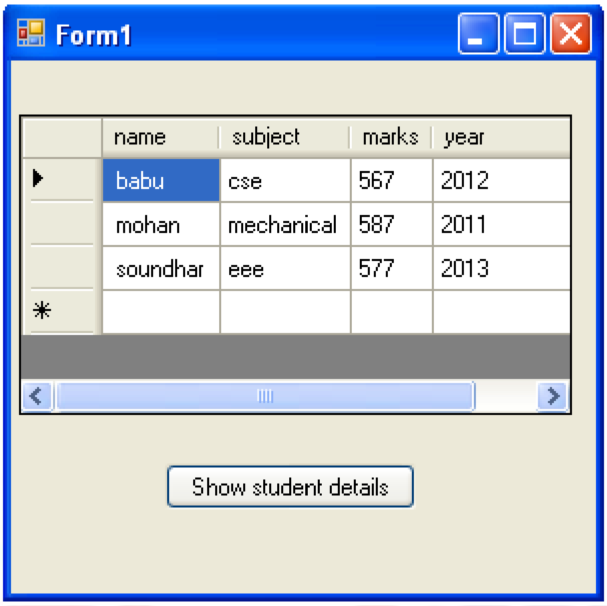
student.xml

```
<?xml version="1.0" encoding="utf-8" ?>
<student>
  <stud>
    <name> babu </name>
    <subject>cse</subject>
    <marks>567</marks>
    <year>2012</year>
  </stud>
  <stud>
    <name> mohan</name>
    <subject>mechanical</subject>
    <marks>587</marks>
    <year>2011</year>
  </stud>
  <stud>
    <name> soundhar </name>
    <subject>eee</subject>
    <marks>577</marks>
    <year>2013</year>
  </stud>
</student>
```

Click event of buton1:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Text;
using System.Windows.Forms;
namespace exb2
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }
        private void button1_Click(object sender, EventArgs e)
        {
            DataSet dataset = new DataSet();
            dataset.ReadXml(@"C:\Documents and Settings\cse\My Documents\Visual
Studio 2005\Projects\exb2\exb2\students.xml");
            dataGridView1.DataSource = dataset.Tables[0];

        }
    }
}
```

OUTPUT:



name	subject	marks	year
babu	cse	567	2012
mohan	mechanical	587	2011
soundhar	eee	577	2013

RESULT:

thus the above xml document was read by datagridview and executed successfully.

Ex No:3 READ EMPLOYEE DATA FROM XML DOCUMENTAND DISPLAY

AIM:

To develop a windows application to read an xml document containing employee name, code, basic pay, HRA, DA into a dataset.

PROCEDURE:

1. Open Microsoft Visual Studio File-> New -> Project.
2. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.
3. On Project menu click Add New Item -> then click XML file option -> enter the XML filename as employee.xml.
4. On Form1 add button 1 and DataGridView and set name as show employee details for button 1.
5. On Form1 add a dataset control and select untyped dataset option and click ok.
6. Enter the code for button1.
7. Run the application.

SOURCE CODE:

employee.xml

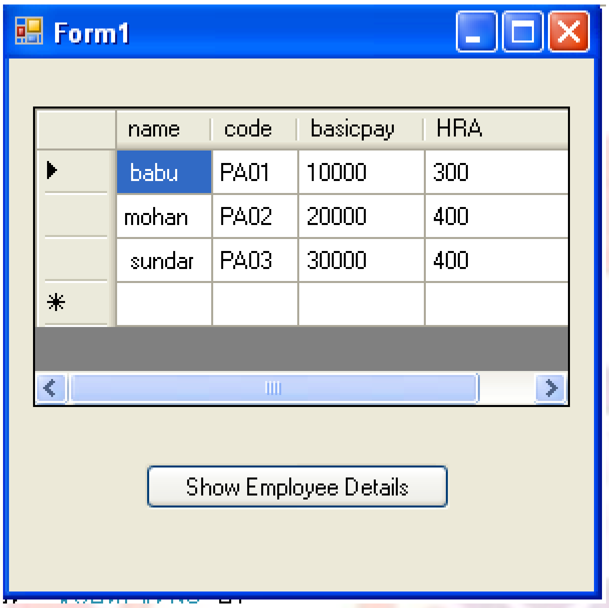
```
<?xml version="1.0" encoding="utf-8" ?>
<employee>
  <emp>
    <name> babu </name>
    <code>PA01</code>
      <basicpay>10000</basicpay>
      <HRA>300</HRA>
      </emp>
  <emp>
    <name>mohan</name>
    <code>PA02</code>
      <basicpay>20000</basicpay>
```

```
     <HRA>400</HRA>
     </emp>
  <emp>
    <name> sundar </name>
    <code>PA03</code>
     <basicpay>30000</basicpay>
     <HRA>400</HRA>
     </emp>
</employee>
```

Click event of buton1:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Text;
using System.Windows.Forms;
namespace exb3
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }
        private void button1_Click(object sender, EventArgs e)
        {
            DataSet dataset = new DataSet();
            dataset.ReadXml(@"C:\Documents and Settings\cse\My Documents\Visual
Studio 2005\Projects\exb3\exb3\employee.xml");
            dataGridView1.DataSource = dataset.Tables[0];

        }
        }
    }
```

OUTPUT:



	name	code	basicpay	HRA
▶	babu	PA01	10000	300
	mohan	PA02	20000	400
	sundar	PA03	30000	400
*				

RESULT :

Thus the employee xml database was accessed using dataset and executed successfully.

Ex No: 4 GENERATE XML DOCUMENT CONTAINING EMPLOYEE RECORDS

AIM:

To develop a Window application to read employee records from Database and generate XML document containing employee records.

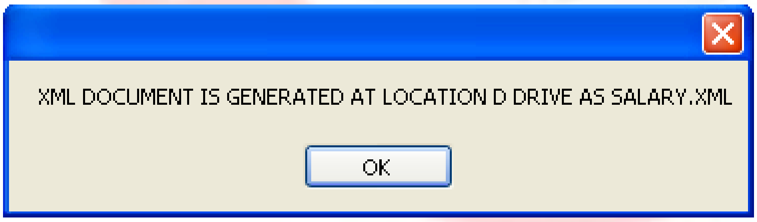
PROCEDURE:

1. Open Microsoft Visual Studio -> Create a table and database in Server Explorer window.
2. In the table create appropriate column name and data type and insert the data in table.
3. Open Microsoft Visual Studio File-> New -> Project.
4. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.
5. Drag and drop the dataset and datagridview control on form1.
6. Write event procedure and run application.

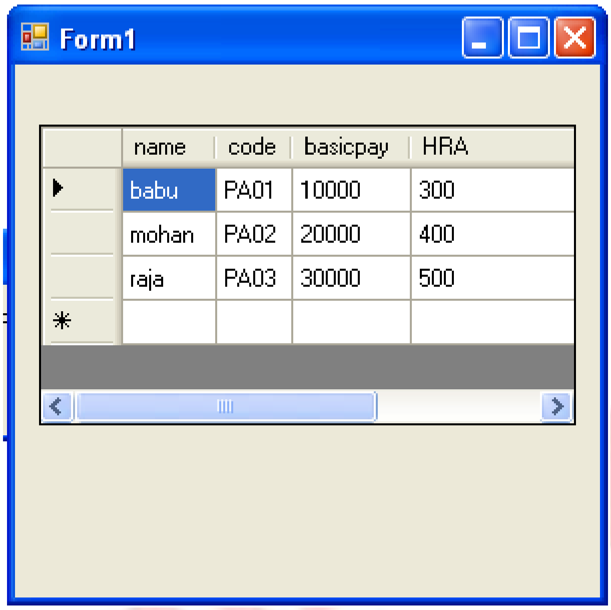
SOURCE CODE:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Text;
using System.Windows.Forms;
using System.Data.SqlClient;

namespace WindowsApplication11
{
    public partial class Form1 : Form
    {
        public SqlConnection con;
        public SqlCommand com;
        public Form1()
        {
            InitializeComponent();
        }
        private void Form1_Load(object sender, EventArgs e)
        {
            SqlConnection conn = new SqlConnection("Data Source=pa-
2259bf176d4d;initial  Catalog=employee;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("Select * from emp", conn);
            SqlDataAdapter sda = new SqlDataAdapter(cmd);
            DataSet ds = new DataSet();
            sda.Fill(ds);
            ds.Tables[0].WriteXml(@"D:\sal.xml");
            dataGridView1.DataSource = ds.Tables[0];
            MessageBox.Show("XML DOCUMENT IS GENERATED AT LOCATION
D DRIVE AS SALARY.XML");
        }
    }
}
```

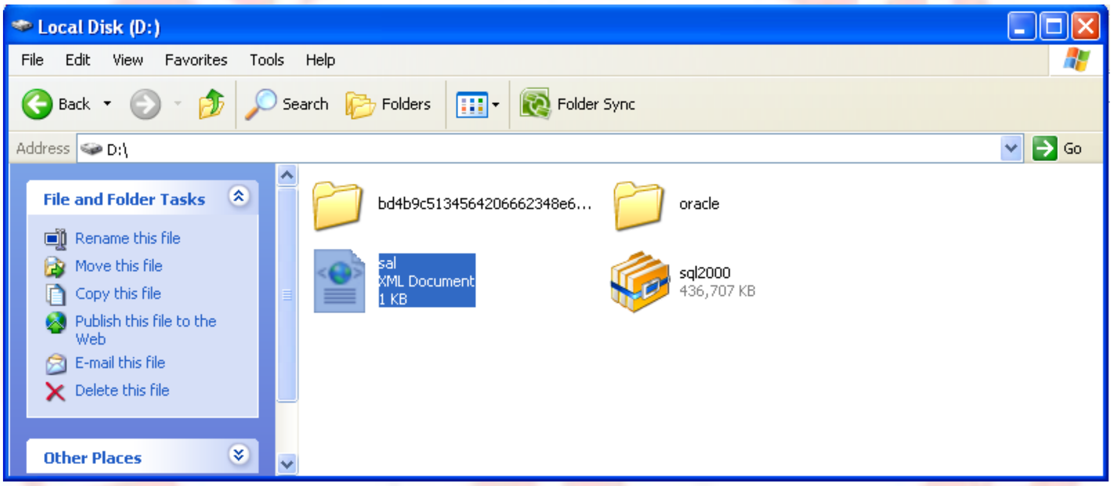
OUTPUT:



XML DOCUMENT IS GENERATED AT LOCATION D DRIVE AS SALARY.XML



	name	code	basicpay	HRA
▶	babu	PA01	10000	300
	mohan	PA02	20000	400
	raja	PA03	30000	500
*				



RESULT:

Program code to read employee records from Database and generate XML document containing employee records is verified.

Ex No:5 GENERATE XML DOCUMENT CONTAINING STUDENTS RECORDS

AIM:

To develop a Window application to read students records from Database using ADO.NET and generate XML document containing students records.

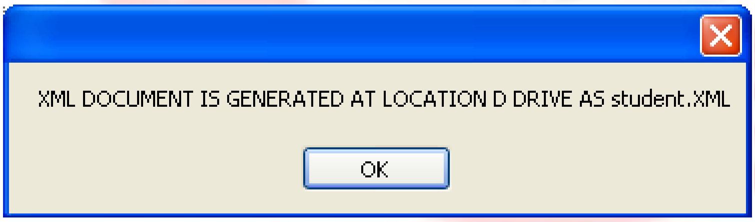
PROCEDURE:

1. Open Microsoft Visual Studio -> Create a table and database in Server Explorer window.
2. In the table create appropriate column name and data type and insert the data in table.
3. Open Microsoft Visual Studio File-> New -> Project.
4. Select project type as Visual C# -> Windows and Template type as Windows application, then click OK.
5. Drag and drop the dataset and datagridview control on form1.
6. Write event procedure and run application.

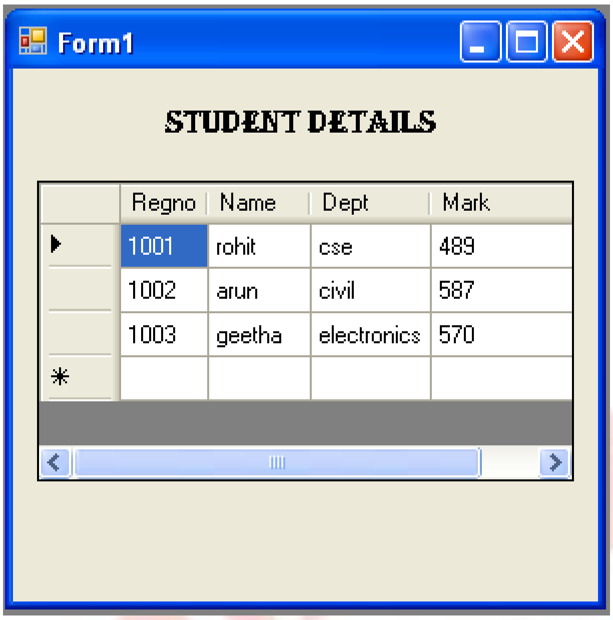
SOURCE CODE:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Text;
using System.Windows.Forms;
using System.Data.SqlClient;

namespace WindowsApplication12
{
    public partial class Form1 : Form
    {
        public SqlConnection con;
        public SqlCommand com;
        public Form1()
        {
            InitializeComponent();
        }
        private void Form1_Load(object sender, EventArgs e)
        {
            SqlConnection conn = new SqlConnection("Data Source=pa-
2259bf176d4d;initial Catalog=students;Integrated Security=True");
            conn.Open();
            SqlCommand cmd = new SqlCommand("Select * from stu", conn);
            SqlDataAdapter sda = new SqlDataAdapter(cmd);
            DataSet ds = new DataSet();
            sda.Fill(ds);
            ds.Tables[0].WriteXml(@"D:\student.xml");
            dataGridView1.DataSource = ds.Tables[0];
            MessageBox.Show("XML DOCUMENT IS GENERATED AT LOCATION
D DRIVE AS student.XML");

        }
    }
}
```

OUTPUT:

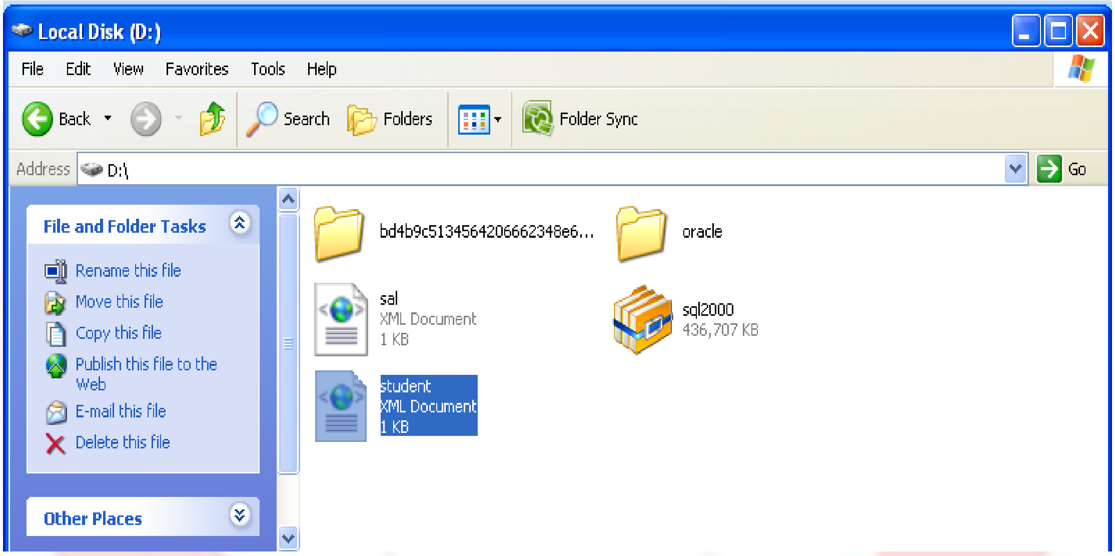


XML DOCUMENT IS GENERATED AT LOCATION D DRIVE AS student.XML



STUDENT DETAILS

Regno	Name	Dept	Mark
1001	rohit	cse	489
1002	arun	civil	587
1003	geetha	electronics	570



Address: D:\

bd4b9c5134564206662348e6...

oracle

sal
XML Document
1 KB

sql2000
436,707 KB

student
XML Document
1 KB

RESULT:

Program code to read students records from Database using ADO.NET and generate XML document containing students records is verified.