SYBCA BCA-406- Practical on C#.Net
Ass. No. 1. Write a program to print "Teach One, Each One, Tree One" given number of times.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;

namespace ConsoleApplication1
{
classProgram
   {
staticvoid Main(string[] args)
      {
int i,n;

Console.Write("Enter value of N : ");
         n = Int32.Parse(Console.ReadLine());

for (i=1; i<=n; i++)
Console.WriteLine("Teach One, Each One, Tree One");

Console.ReadKey();
      }
   }
}
```

Output:

```
Enter value of N : 10
Teach One, Each One, Tree One
Teach One, Each One, Tree One
Teach One, Each One, Tree One
Teach One, Each One, Tree One
Teach One, Each One, Tree One
Teach One, Each One, Tree One
Teach One, Each One, Tree One
Teach One, Each One, Tree One
Teach One, Each One, Tree One
Teach One, Each One, Tree One
```

Ass. No. 2. Write a program to show use of different operators

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;

namespace ConsoleApplication2
{
classProgram
   {
staticvoid Main(string[] args)
      {
int x, y, z;
bool a;

Console.Write("Enter value of X : ");
         x = Int32.Parse(Console.ReadLine());
Console.Write("Enter value of Y : ");
         y = Int32.Parse(Console.ReadLine());

         z = x + y;
Console.WriteLine("Addition = " + z);

         z = x - y;
Console.WriteLine("Subtraction = " + z);

         z = x * y;
Console.WriteLine("Multiplication = " + z);

         z = x / y;
Console.WriteLine("Division = " + z);

         a = x > y;
Console.WriteLine("X > Y = " + a);

         a = x < y;
Console.WriteLine("X < Y = " + a);

         a = x != y;
Console.WriteLine("X != Y = " + a);

         a = x == y;
Console.WriteLine("X == Y = " + a);

         z = x >> 1;
Console.WriteLine("X >> 1 = " + z);

         z = x << 1;
Console.WriteLine("X << 1 = " + z);

Console.ReadKey();
      }
   }
}
```

Output:

```
Enter value of X : 20
Enter value of Y : 15
Addition = 35
Subtraction = 5
Multiplication = 300
Division = 1
X > Y = True
X < Y = False
X != Y = True
X == Y = False
X >> 1 = 10
X << 1 = 40
```

Ass. No. 3. Write a program to show use of Looping Constructs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;

namespace ConsoleApplication3
{
classProgram
   {
staticvoid Main(string[] args)
      {
int i, n, f=1;

Console.Write("Enter value of N : ");
         n = Int32.Parse(Console.ReadLine());

for (i = 1; i <= n; i++)
            f = f * i;

Console.WriteLine("Factorial  of  "+ n + " = "+ f);

Console.ReadKey();
      }
   }
}
```

Output:

```
Enter value of N : 5
Factorial  of  5 = 120
```

Ass.No4. Write a program to show use of Constructor

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;

namespace ConsoleApplication4
{
classProgram
    {
int x;

        Program()
        {
           x = 100;
Console.WriteLine("Demonstrating  Default constructor");
Console.WriteLine("X = " + x);
        }

        Program(int p)
        {
           x = p;
Console.WriteLine("Demonstrating  Parameterized constructor");
Console.WriteLine("X = " + x);
        }
staticvoid Main(string[] args)
        {

Program obj1 = newProgram();

Program obj2 = newProgram(200);

Console.ReadKey();
        }
    }
}
```

Output:

```
Demonstrating  Default constructor
X = 100
Demonstrating  Parameterized constructor
X = 200
```

Ass.No5. Write a program to demonstrate Inheritance

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;

namespace ConsoleApplication5
{
publicclassstudent
    {
int rno;
string name;

publicvoid getStudent()
        {
Console.Write("Enter Roll No. : ");
            rno =
Int32.Parse(Console.ReadLine());

Console.Write("Enter Name : ");
            name = Console.ReadLine();
        }

publicvoid putStudent()
        {
Console.WriteLine("Roll No. = " + rno);
Console.WriteLine("Name = " + name);
        }
    }

classmarks : student
    {
int m1, m2, m3, total;

publicvoid getMarks()
        {
Console.Write("Enter marks of 3 subjects :
");
            m1 =
Int32.Parse(Console.ReadLine());
            m2 =
Int32.Parse(Console.ReadLine());
            m3 =
Int32.Parse(Console.ReadLine());
            total = m1 + m2 + m3;
        }

publicvoid putMarks()
        {
Console.WriteLine("# M1  = " + m1);
Console.WriteLine("# M2  = " + m2);
Console.WriteLine("# M3  = " + m3);
Console.WriteLine("Total = " + total);
        }
    }

classProgram
    {
staticvoid Main(string[] args)
        {
marks s1 = newmarks();
            s1.getStudent();
            s1.getMarks();

            s1.putStudent();
            s1.putMarks();

Console.ReadKey();
        }
    }
}
```

Output:

```
Enter Roll No. : 12
Enter Name : Bharat
Enter marks of 3 subjects : 56
68
75
Roll No. = 12
Name = Bharat
# M1  = 56
# M2  = 68
# M3  = 75
Total = 199
```

Ass.No. 6. Write a program to show use of Exception Handling

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;

namespace ConsoleApplication6
{
classProgram
   {
staticvoid Main(string[] args)
      {
int x, y ;
int div ;

try
         {
Console.Write("Enter value of X : ");
            x = Int32.Parse(Console.ReadLine());

Console.Write("Enter value of Y : ");
            y = Int32.Parse(Console.ReadLine());

            div = x / y;
Console.WriteLine("Division = " + div);
         }
catch (DivideByZeroException de)
         {
Console.WriteLine("Exception Occured.");
Console.WriteLine(de.Message);
         }
Console.ReadKey();

      }
   }
}
```

Output:

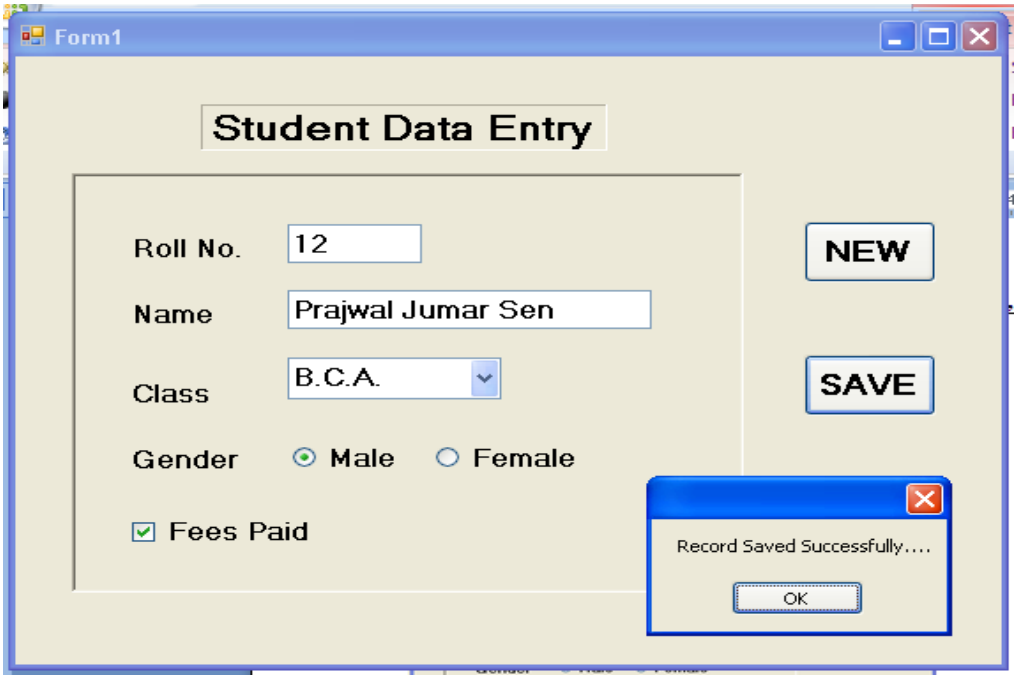
i) Enter value of X : 20
   Enter value of Y : 2
   Division = 10

ii) Enter value of X : 20
   Enter value of Y : 0
   Exception Occured.
   Attempted to divide by zero.

Ass.No. 7. Create a simple C# application using Label, TextBox, and Button control

```
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
{
publicpartialclassForm1 : Form
   {
public Form1()
      {
         InitializeComponent();
      }

privatevoid button2_Click(object sender, EventArgs e)
      {
MessageBox.Show ("Record Saved Successfully....");
      }

privatevoid button3_Click(object sender, EventArgs e)
      {
Application.Exit();
      }
   }
}
```

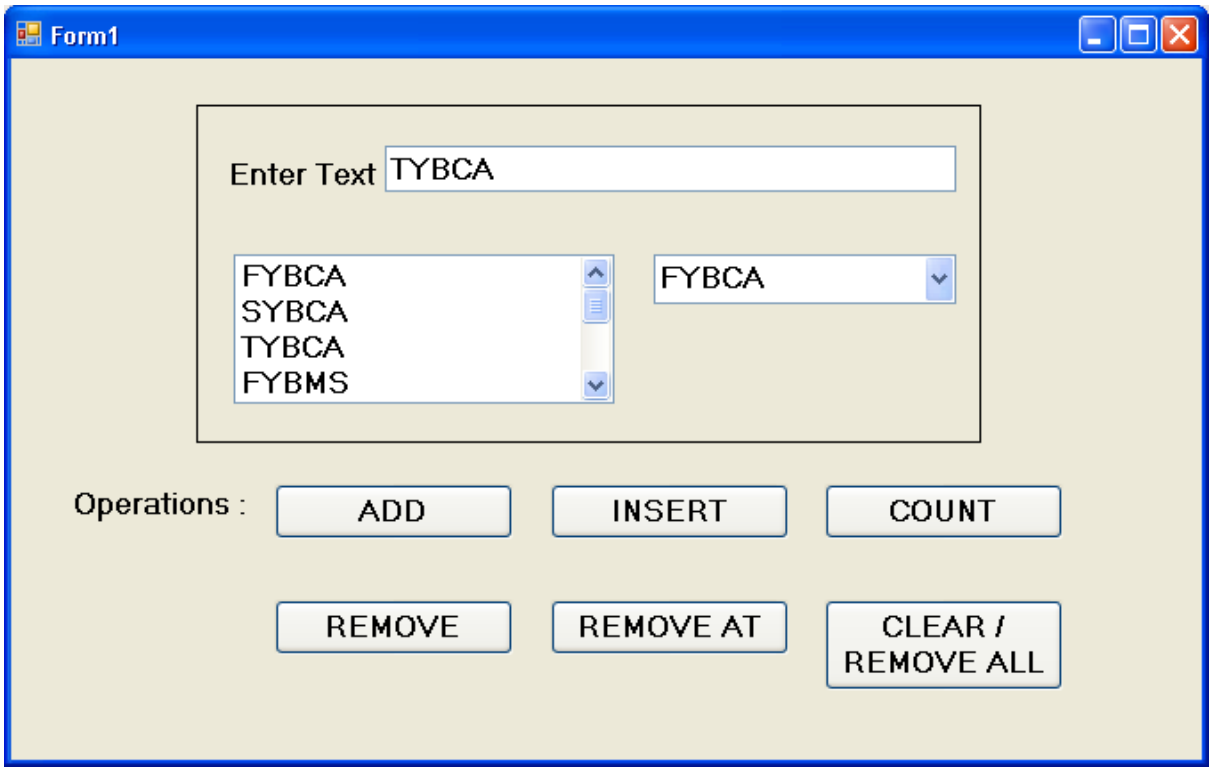
Output:



Ass. No. 8. Create a C# application using ListBox, ComboBox control

```
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 WindowsFormsApplication2
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         listBox1.Items.Add(textBox1.Text);
         comboBox1.Items.Add(textBox1.Text);
         textBox1.Text = "";
         textBox1.Focus();
      }

      private void button2_Click(object sender, EventArgs e)
      {
         listBox1.Items.Remove(listBox1.Text);
         comboBox1.Items.Remove(comboBox1.Text);
      }

      private void button3_Click(object sender, EventArgs e)
      {
         listBox1.Items.RemoveAt(1);
         comboBox1.Items.RemoveAt(1);
      }

      private void button4_Click(object sender, EventArgs e)
      {
         textBox1.Text = Convert.ToString(listBox1.Items.Count);
      }

      private void button5_Click(object sender, EventArgs e)
      {
         listBox1.Items.Insert(2, textBox1.Text);
      }
   }
}
```

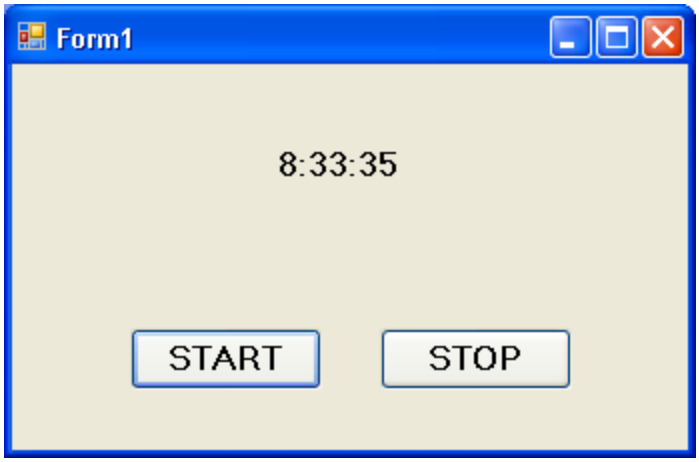
Output:


Form1
Enter Text
TYBCA
FYBCA
SYBCA
TYBCA
FYBMS
FYBCA
Operations :
ADD
INSERT
COUNT
REMOVE
REMOVE AT
CLEAR / REMOVE ALL

Ass. No. 9. Demonstrate the use of Timer control in C#

```
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 WindowsFormsApplication3
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         timer1.Start();
      }

      private void timer1_Tick(object sender, EventArgs e)
      {
         label2.Text =  DateTime.Now.Hour + ":" + DateTime.Now.Minute + ":" +
                        DateTime.Now.Second;
      }

      private void button2_Click(object sender, EventArgs e)
      {
         timer1.Stop();
      }
   }
}
```

Output:


Form1
8:33:35
START
STOP

Ass. No. 10. Create a C# application using PictureBox, ScrollBar control

```
using System;
using System.ComponentModel;
using System.Drawing;
using System.Text;
using System.Windows.Forms;

namespace WindowsFormsApplication4
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void hScrollBar1_Scroll(object sender, ScrollEventArgs e)
      {
         pictureBox1.Width = pictureBox1.Width + hScrollBar1.Value;
         pictureBox1.Height = pictureBox1.Height + hScrollBar1.Value;
      }
   }
}
```

Output:

Ass. No. 11. Demonstrate Simple Database Connectivity using wizard.