ASP.NET with C#

LAB Manual

<u>AIM</u>: Write a console application that obtains four int values from the user and displays the product.

Hint: you may recall that the Convert.ToDouble() command was used to convert the input from the console to a double; the equivalent command to convert from a string to an int is Convert.ToInt32().

CODE:

```
using System;
namespace ConsoleApplication1
  class Program
    static void Main(string[] args)
       int num1, num2,num3,num4,prod;
       Console.Write("Enter number 1: ");
       num1 = Int32.Parse(Console.ReadLine());
       Console. Write("Enter number 2: ");
       num2 = Convert.ToInt32(Console.ReadLine());
       Console. Write("Enter number 3: ");
       num3 = Convert.ToInt32(Console.ReadLine());
       Console. Write("Enter number 4: ");
       num4 = Convert.ToInt32(Console.ReadLine());
       prod = num1 * num2 * num3 * num4;
      Console. WriteLine(num1 + "*" + num2 + "*" + num3 + "*" + num4 + "=" + prod);
    }
  }
```

OUTPUT:

Enter number 1: 6 Enter number 2: 5 Enter number 3: 4 Enter number 4: 3 6*5*4*3=360

<u>AIM</u>: If you have two integers stored in variables var1 and var2, what Boolean test can you perform to see if one or the other (but not both) is greater than 10?

CODE:

```
using System;
namespace ConsoleApplication2
{
    class Program
    {
        static void Main(string[] args)
        {
            int var1, var2;
            Console.Write("Enter number 1: ");
            var1 = Int32.Parse(Console.ReadLine());
            Console.Write("Enter number 2: ");
            var2 = Convert.ToInt32(Console.ReadLine());
            if ((var1 > 10 && var2 <= 10) || (var2 > 10 && var1 <= 10))
            {
                 Console.WriteLine("Boolean test succedded \n Both number are not >10");
            }
        }
    }
}
```

OUTPUT:

Enter number 1: 5
Enter number 2: 11
Boolean test succedded
Both number are not >10

$\underline{\mathbf{PRACTICAL\ NO.:01(C)}}$

<u>AIM</u>: Write an application that includes the logic from Exercise 1, obtains two numbers from the user, and displays them, but rejects any input where both numbers are greater than 10 and asks for two new numbers.

CODE:

```
using System;
namespace ConsoleApplication2
  class Program
    static void Main(string[] args)
       int var1, var2;
       label1:
       Console. Write("Enter number 1: ");
       var1 = Int32.Parse(Console.ReadLine());
       Console. Write("Enter number 2: ");
       var2 = Convert.ToInt32(Console.ReadLine());
       if ((var1 > 10 \&\& var2 > 10))
         Console. WriteLine("Both No are greater than 10 are not allowed");
         goto label1;
       else
         Console.WriteLine("Number 1: "+var1);
         Console.WriteLine("Number 2 :"+var2);
```

OUTPUT:

Enter number 1:15
Enter number 2: 16
Both no. are greater than 10 are not allowed
Enter number 1:5
Enter number 2: 15
Number 1: 5
Number 2:15

<u>AIM</u>: Write a console application that places double quotation marks around each word in a string .

CODE:

```
using System;
namespace ConsoleApplication3
{
    class Program
    {
        static void Main(string[] args)
        {
            string str1;
            Console.Write("Enter string 1: ");
            str1 = Console.ReadLine();
            string[] words = str1.Split(' ');
            for (int i = 0; i < words.Length; i++)
            {
                  Console.Write("\" " + words[i] + "\" ");
            }
            }
        }
    }
}</pre>
```

OUTPUT:

Enter string 1: we can and we will "we" "can" "and" "we" "will"

<u>**AIM**</u>: Write an application that uses two command-line arguments to place values into a string and an integer variable, respectively. Then display these values.

CODE:

```
using System;
namespace cmdLineArgs
{
    class Program
    {
        static void Main(string[] args)
        {
            string str = args[0];
            int n = Convert.ToInt32(args[1]);
            Console.WriteLine("String:" + str);
            Console.WriteLine("Number:" + n);
        }
    }
}
```

OUTPUT:

String: Roman Number: 10

<u>AIM</u>: Write an application that receives the following information from a set of students:

Student Id:

Student Name:

Course Name:

Date of Birth:

The application should also display the information of all the students once the data is Entered. Implement this using an Array of Structures.

CODE:

```
using System;
namespace ArrayOfStructs
  class Program
     struct Student
       public string studid, name, cname;
       public int day, month, year;
     static void Main(string[] args)
       Student[] s = new Student[5];
       int i:
       for (i = 0; i < 5; i++)
          Console. Write("Enter Student Id:");
          s[i].studid = Console.ReadLine();
          Console. Write("Enter Student name: ");
          s[i].name = Console.ReadLine();
          Console.Write("Enter Course name : ");
          s[i].cname = Console.ReadLine();
          Console. Write("Enter date of birth\n Enter day(1-31):");
          s[i].day = Convert.ToInt32(Console.ReadLine());
          Console.Write("Enter month(1-12):");
          s[i].month = Convert.ToInt32(Console.ReadLine());
          Console.Write("Enter year:");
          s[i].year = Convert.ToInt32(Console.ReadLine());
       Console. WriteLine("\n\nStudent's List\n");
       for (i = 0; i < 5; i++)
          Console. WriteLine("\nStudent ID: " + s[i].studid);
          Console.WriteLine("\nStudent name : " + s[i].name);
          Console. WriteLine("\nCourse name : " + s[i].cname);
          Console. WriteLine("\nDate of birth(dd-mm-yy): " + s[i].day + "-" + s[i].month +
"-" + s[i].year);
       } } }
```

OUTPUT:

Enter Student Id:0001

Enter Student name : Prachit Enter Course name : MSCit

Enter date of birth Enter day(1-31):29 Enter month(1-12):9 Enter year:1995

Enter Student Id:0002 Enter Student name : Aniket Enter Course name : Bscit

Enter date of birth Enter day(1-31):4 Enter month(1-12):3 Enter year:1996

Enter Student Id:0003

Enter Student name: Prathamesh

Enter Course name: BMS

Enter date of birth Enter day(1-31):9 Enter month(1-12):8 Enter year:2000 Enter Student Id:0004

Enter Student 1d:0004
Enter Student name : Sumit
Enter Course name : MScet

Enter date of birth Enter day(1-31):25 Enter month(1-12):5 Enter year:1994

Enter Student Id: 0005 Enter Student name: Zaid Enter Course name: BCOM

Enter date of birth Enter day(1-31):6 Enter month(1-12):7 Enter year:1993

Student's List

Student ID: 0001 Student name: Prachit Course name: MSCit

Date of birth(dd-mm-yy): 29-9-1995

Student ID: 0002 Student name: Aniket Course name: Bscit

Date of birth(dd-mm-yy): 4-3-1996

Student ID: 0003

Student name: Prathamesh

Course name: BMS

Date of birth(dd-mm-yy): 9-8-2000

Student ID: 0004 Student name: Sumit Course name: MScet

Date of birth(dd-mm-yy): 25-5-1994 Student ID: 0005

Student ID: 0005 Student name: Zaid Course name: BCOM

Date of birth(dd-mm-yy): 6-7-1993

<u>AIM</u>: Write programs using conditional statements and loops: I) Generate Fibonacci series.

```
CODE:
```

```
using System;
namespace ConsoleApplication3
  class Program
    static void Main(string[] args)
      int num1=0,num2=1,num3,num4,num,counter;
       Console. Write ("Upto how many number you want fibonacci
       series:"); num=int.Parse(Console.ReadLine()); counter=3;
       Console.Write(num1+"\t"+num2);
       while(counter<=num)</pre>
         num3 = num1 + num2;
                    if (counter >= num)
           break;
        Console.Write("\t" + num3);
        num1 = num2;
         num2 = num3;
         counter++;
```

OUTPUT:

```
Upto how many number you want fibonacci series:5 0 1 1 2 3
```

<u>AIM</u>: Write programs using conditional statements and loops:

II) Generate various patterns (triangles, diamond and other patterns) with numbers.

<u>CODE -1</u>:

123412345

CODE -2:

OUTPUT:

CODE -3:

```
using System;
namespace ConsoleApplication1
  class Program
    static void Main(string[] args)
       int row, sp, col,revcol;
       for (row = 1; row <= 5; row++)
         for (sp = 1; sp \le 5 - row; sp++)
            Console.Write(' ');
         for (col = 1; col <= row; col++)
            Console.Write(col);
         for (revcol = col - 2; revcol >= 1; revcol--)
            Console. Write(revcol);
            Console.WriteLine();
OUTPUT:
   121
  12321
 1234321
123454321
```

```
CODE-4:
```

```
using System;
namespace ConsoleApplication1
  class Program
    static void Main(string[] args)
       int row, sp, col, revcol;
for (row = 1; row \leq 5; row++)
                                                     {
         for (sp = 1; sp \le 5 - row; sp++)
            Console.Write(' ');
          for (col = 1; col <= row; col++)
            Console.Write(col);
          for (revcol = col - 2; revcol >= 1; revcol--)
          { Console. Write(revcol); }
          Console.WriteLine();
       for (row = 4; row >= 1; row--) {
          for (sp = 1; sp \le 5 - row; sp++)
            Console. Write('');
          for (col = 1; col <= row; col++)
            Console.Write(col);
          for (revcol = col - 2; revcol >= 1; revcol--)
          { Console. Write(revcol); }
          Console.WriteLine();
       } } }
 OUTPUT:
     1
   121
  12321
 1234321
123454321
 1234321
  12321
   121
     1
```

```
CODE-5:
```

```
using System;
namespace pattern
 class Program
     static void Main(string[] args)
       int row, col,sp,reverse;
         for (row = 1; row \le 5; row ++)
          for (sp = 1; sp \le 5 - row; sp++)
            Console.Write(" ");
          for (col = 1; col \le row; col ++)
            if (col == 1)
               Console.Write("*");
            else
               Console.Write(" ");
          for (reverse = col - 2; reverse >= 1; reverse--)
            if (reverse == 1)
               Console.Write("*");
            else
               Console.Write(" ");
          Console.WriteLine();
       for (row = 4; row >= 1; row--)
          for (sp = 1; sp \le 5 - row; sp++)
            Console.Write(" ");
          for (col = 1; col \le row; col ++)
            if (col == 1)
               Console.Write("*");
            else
               Console.Write(" ");
          for (reverse = col - 2; reverse >= 1; reverse--)
            if (reverse == 1)
               Console.Write("*");
            else
               Console.Write(" ");
          Console.WriteLine();
     } } }
```

OUTPUT:

<u>AIM</u>: Write programs using conditional statements and loops: III) Test for prime numbers.

```
CODE:
using System;
```

```
namespace testprime
  class Program
     static void Main(string[] args)
       int num, counter;
       Console.Write("Enter number:");
       num = int.Parse(Console.ReadLine());
       for (counter = 2; counter <= num / 2; counter++)</pre>
       {
          if((num \% counter) == 0)
            break;
       if (num == 1)
          Console.WriteLine(num + "is neither prime nor composite");
       else if(counter<(num/2))</pre>
       Console.WriteLine(num+"is not prime number");
       else
       Console.WriteLine(num+"is prime number");
OUTPUT:
(1<sup>st</sup> attempt)
Enter number:3
3 is prime number
(2^{\text{nd}})
Enter number:1
1 is neither prime nor composite
(3^{rd})
Enter number:4
4 is not prime number
```

<u>**AIM**</u>: Write programs using conditional statements and loops:

IV) Generate prime numbers.

```
CODE:
using System;
namespace testprime
  class Program
     static void Main(string[] args)
       int counter, lowerlimit, upperlimit, limitCounter;
       Console.Write("Enter lowerlimit:"); lowerlimit =
       int.Parse(Console.ReadLine());
       Console.Write("Enter upperlimit:"); upperlimit =
       int.Parse(Console.ReadLine());
       Console.WriteLine("Prime number between " + lowerlimit + "and " + upperlimit + "
are ");
       for (limitCounter = lowerlimit; limitCounter <= upperlimit; limitCounter++)</pre>
          for (counter = 2; counter <= limitCounter / 2; counter++)</pre>
            if ((limitCounter % counter) == 0)
               break;
          if (limitCounter == 1)
            Console. WriteLine(limitCounter + "is neither prime nor composite");
          else if (counter >= (limitCounter / 2))
            Console.WriteLine(limitCounter + "\t");
        Console.WriteLine();
     }}}
OUTPUT:
Enter lowerlimit:1
Enter upperlimit:15
Prime number between 1 and 15 are
1 is neither prime nor composite
2
3
4
5
7
11
```

<u>AIM</u>: Write programs using conditional statements and loops:

V) Reverse a number and find sum of digits of a number.

CODE:

```
using System;
namespace reverseNumber
  class Program
    static void Main(string[] args)
       int num,actualnumber,revnum=0,digit,sumDigits=0;
       Console.Write("Enter number:"); num =
       int.Parse(Console.ReadLine());
       actualnumber = num;
       while (num > 0)
         digit = num \% 10;
         revnum = revnum * 10 + digit;
         sumDigits=sumDigits+digit;
         num = num / 10;
       Console. WriteLine("Reverse of " + actualnumber + "=" +
       revnum); Console. WriteLine("Sum of its digits:" + sumDigits);
  }
}
```

OUTPUT:

Enter number:15 Reverse of 15=51 Sum of its digits:6

<u>AIM</u>: Write programs using conditional statements and loops: V) Test for vowels.

```
CODE:
using System;
```

p is not a vowel

```
namespace vowels
  class Program
     static void Main(string[] args)
       char ch;
       Console.Write("Enter a character: ");
       ch = (char)Console.Read();
       switch (ch)
          case 'a':
          case 'A':
          case 'e':
          case 'E':
          case 'i':
          case T:
          case 'o':
          case 'O':
          case 'u':
          case 'U':
            Console.WriteLine(ch + "is vowel");
            break;
          default:
            Console. Write(ch + "is not a vowel");
      Console.ReadKey();
OUTPUT:
Enter a character: a
a is vowel
Enter a character: p
```

<u>AIM</u>: Write programs using conditional statements and loops: **VII**) Use of foreach loop with arrays.

CODE:

```
using System;
class ExampleForEach
{
    public static void Main()
    {
        string[] str = { "Shield", "Evaluation", "DX" };
        foreach (String s in str)
        {
            Console.WriteLine(s);
        }
    }
}
```

OUTPUT:

Shield Evaluation DX

PRACTICAL NO. : 02(1)

<u>AIM</u>: Write a program to declare a class "staff" having data members as name and post.accept this data 5for 5 staffs and display names of staff who are HOD.

CODE:

```
using System;
namespace staff
  class staff
     string name, post;
     public void getdata()
       Console. Write("Enter name and post:");
       name = Console.ReadLine();
       post = Console.ReadLine();
     public void display()
       Console. WriteLine(name + "\t\t" + post);
     public string getPost()
       return post;
  class program
    static void Main(string[] args)
       staff[] objStaff = new staff[5];
       for (i = 0; i < 5; i++)
          objStaff[i] = new staff();
          objStaff[i].getdata();
       Console. WriteLine("Name \t\t Post");
       for (i = 0; i < 5; i++)
          if (objStaff[i].getPost() == "HOD")
            objStaff[i].display();
     }
```

OUTPUT:

Enter name and post:Prachit

HOD

Enter name and post:Sumit

PM

Enter name and post: Aniket

HOD

Enter name and post:Prathamesh

PM

Enter name and post:Zaid

CA

Name Post Prachit HOD Aniket HOD

PRACTICAL NO. : 02(2)

<u>AIM</u>: Write a program to declare class "Distance" have data members dist1,dist2,dist3. Initialize the two data members using constructor and store their addition in third data member using function and display addition.

CODE:

```
using System;
namespace distanceclass
  class Distance
     int dist1,dist2,dist3;
     public Distance(int dist1,int dist2)
       this.dist1=dist1;
       this.dist2=dist2;
     public void addition()
       dist3=dist1+dist2;
     public void display()
       Console.WriteLine("Distance1:"+ dist1);
       Console.WriteLine("Distance1:"+ dist2);
       Console.WriteLine("Distance1:"+ dist3);
     } }
    class program
     static void Main(string[] args)
       Distance objDistance = new Distance(10, 20);
       objDistance.addition();
       objDistance.display();
     } } }
```

OUTPUT:

Distance1:10 Distance1:20 Distance1:30

PRACTICAL NO.: 02(3)

<u>AIM</u>: Write a program using function overloading to swap two integer numbers and swap two float numbers.

CODE:

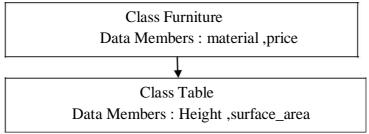
```
using System;
namespace swap
  class Overloading
     public void swap(ref int n, ref int m)
       int t;
       t = n;
       n = m;
       m = t;
     public void swap(ref float f1, ref float f2)
       float f;
       f = f1;
       f1 = f2;
       f2 = f;
     }
  class program
     static void Main(string[] args)
       Overloading objOverloading = new Overloading();
       int n = 10, m = 20;
       objOverloading.swap(ref n, ref m);
       Console. WriteLine("N=" + n + "\backslash tM=" + m);
       float f1 = 10.5f, f2 = 20.6f;
       objOverloading.swap(ref f1, ref f2);
       Console. WriteLine("F1=" + f1 + "\tF2=" + f2);
     } } }
```

OUTPUT:

```
N=20 M=10
F1=20.6 F2=10.5
```

PRACTICAL NO.: 02(4)

<u>**AIM**</u>: Write a program to implement single inheritance from following figure. Accept and display data for one table.



CODE:

```
Furniture.cs
using System;
namespace SingleInheritance
  class Furniture
    string material;
    float price;
    public void getdata()
       Console.Write("Enter material: ");
       material = Console.ReadLine();
       Console.Write("Enter price : ");
       price = float.Parse(Console.ReadLine());
    public void showdata()
       Console.WriteLine("Material: " + material);
       Console.WriteLine("Price : " + price);
     } } }
Table.cs
using System;
namespace SingleInheritance
  class Table:Furniture
    int height, surface_area;
    public void getdata()
       base.getdata();
       Console.Write("Enter height: ");
       height = int.Parse(Console.ReadLine());
       Console.Write("Enter surface area: ");
```

```
surface_area = int.Parse(Console.ReadLine());
    public void showdata()
       base.showdata();
       Console. WriteLine("Height: " + height);
       Console.WriteLine("Surface Area: " + surface_area);
     } } }
Program.cs
using System;
namespace SingleInheritance
  class Program
    static void Main(string[] args)
       Table t1 = new Table();
       t1.getdata();
       t1.showdata();
    } } }
OUTPUT:
Enter material: wood
Enter price: 1220
Enter height: 35
```

Enter surface area: 26 Material: wood Price: 1220

Height: 35

Surface Area: 26

} } }

PRACTICAL NO. : 02(5)

<u>AIM</u>: Define a class "salary" which will contain member variable Basic, TA, DA, HRA. Write a program using Constructor with default values for DA and HRA and calculate the salary of employee.

CODE: Salary.cs using System; namespace SalaryConstructure class Salary int basic, ta, da, hra; public Salary() da = 9000;hra = 6000;public void getdata() Console. Write("Enter basic salary: "); basic = int.Parse(Console.ReadLine()); Console. Write("Enter travelling allowance: "); ta = int.Parse(Console.ReadLine()); public void showdata() Console.WriteLine("Basic salary: " + basic); Console. WriteLine("Dearness allowence: " + da); Console.WriteLine("Housing rent allowence: " + hra); Console. WriteLine("Travelling allowence: " + ta); Console. WriteLine("Gross Salary: " + (basic + da + hra + ta)); } } } **Program.cs** using System; namespace SalaryConstructure class Program static void Main(string[] args) Salary s = new Salary();s.getdata(); s.showdata();

OUTPUT:

Enter basic salary: 52000

Enter travelling allowance : 3000

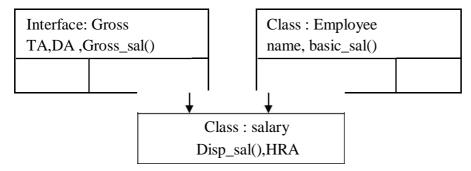
Basic salary: 52000

Dearness allowence : 9000 Housing rent allowence : 6000 Travelling allowence : 3000

Gross Salary: 70000

PRACTICAL NO. : 02(6)

<u>AIM</u>: Program to implement the following multiple inheritance using interface.



CODE:

```
Gross.cs
using System;
namespace MultipleInheritance
{
   interface Gross
   {
    int ta
    {
      get;
      set;
   }
   int da
   {
      get;
      set;
   }
   int GrossSal();
   }
}
```

Employee.cs

```
using System;
namespace MultipleInheritance
{
    class Employee
    {
        string name;
        public Employee(string name)
        { this.name = name; } public
        int BasicSal(int basicSal) {
        return basicSal; }
        public void ShowData()
        {
            Console.WriteLine("Name : " + name);
        } } }
}
```

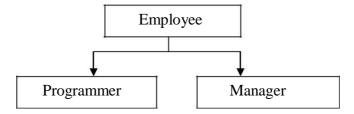
Salary.cs

```
using System;
namespace MultipleInheritance
  class Salary:employee,Gross
     int hra;
     public Salary(string name, int hra):base(name)
     { this.hra = hra; }
     public int ta
       get {return S_ta; }
       set { S_ta = value; }
     private int S_ta;
     public int da
       get { return S_da; }
       set { S_da = value; }
     private int S_da;
     public int GrossSal()
       int gSal;
       gSal = hra + ta + da +
       BasicSal(15000); return gSal;
     public void dispSal()
     { base.ShowData();
         Console.WriteLine("Gross Sal: " + GrossSal());
     } } }
Program.cs
using System;
namespace MultipleInheritance
  class Program
     static void Main(string[] args)
       Salary s = new Salary("Prachit", 35000);
       s.da = 20000;
       s.ta = 30000;
       s.dispSal();
     } } }
OUTPUT:
```

Name:Prachit Gross Sal:100000

PRACTICAL NO.: 02(7)

<u>AIM</u>: Write a program for above class hierarchy for the Employee where the base class is Employee and derived class and Programmer and Manager. Here make display function virtual which is common for all and which will display information of Programmer and Manager interactively.



CODE:

```
Employee.cs
using System;
namespace HeirarchicalInheritance
  class employee
    public virtual void display()
       Console. WriteLine("Display of employee class called ");
     } } }
Programmer.cs
using System;
namespace HeirarchicalInheritance
  class Programmer:employee
    public void display()
       Console. WriteLine(" Display of Programmer class called ");
     } } }
Manager.cs
using System;
namespace HeirarchicalInheritance
  class Manager
    public void display()
       Console. WriteLine("Display of manager class called ");
     } } }
```

Program.cs

```
using System;
namespace HeirarchicalInheritance
  class Program
    static void Main(string[] args)
       Programmer objProgrammer;
       Manager objManager;
       Console.Write("Whose details you want to use to see \n 1.Programmer
\n 2.Manager");
         int choice=int.Parse(Console.ReadLine());
       if(choice==1)
         objProgrammer=new Programmer();
         objProgrammer.display();
       else if(choice==2)
         objManager=new Manager();
         objManager.display();
       }
       else
         Console.WriteLine("Wrong choice entered");
       } } }
```

OUTPUT:

Whose details you want to use to see

- 1. Programmer
- 2. Manager1

Display of Programmer class called

Whose details you want to use to see

- 1. Programmer
- 2. Manager2

Display of manager class called

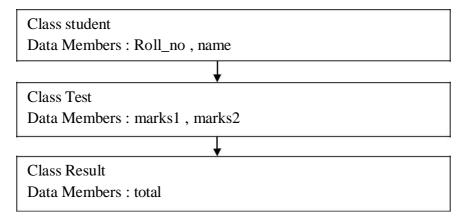
Whose details you want to use to see

- 1. Programmer
- 2. Manager6

Wrong choice entered

PRACTICAL NO.: 02(8)

<u>AIM</u>: Write a program to implement multilevel inheritance from following figure. Accept and display data for one student.



CODE:

```
Result.cs
```

using System;

class Result:Test

namespace multilevelinheritance

```
int total;
     public Result(int roll_no, string name, int marks1, int marks2)
       : base(roll_no, name, marks1, marks2)
       total = getMarks1() + getMarks2();
     public void display()
       base.display();
       Console.WriteLine("Total: " + total);
     } } }
Test.cs
using System;
namespace multilevelinheritance
  class Test:student
     int marks1, marks2;
     public Test(int roll_no, string name, int marks1, int marks2)
       : base(roll_no, name)
       this.marks1 = marks1;
       this.marks2 = marks2:
```

```
}
     public int getMarks1()
       return marks1;
     public int getMarks2()
       return marks2;
     public void dispaly()
       base.display();
       Console.WriteLine("Marks1: " + marks1);
       Console.WriteLine("Marks2: " + marks2);
     } } }
Student.cs
using System;
namespace multilevelinheritance
  class student
    int roll_no;
     string name;
     public student(int roll_no, string name)
       this.roll_no = roll_no;
       this.name = name;
     public student() { }
     public void display()
       Console.WriteLine("Roll no: " + roll_no);
       Console.WriteLine("Name: " + name);
     } } }
Program.cs
using System;
namespace multilevelinheritance
  class Program
    static void Main(string[] args)
       Result r1 = new Result(101, "Prachit", 50, 70);
       r1.display();
     } } }
```

OUTPUT:

Roll no: 101 Name: Prachit Marks1: 50 Marks2: 70 Total: 120

PRACTICAL NO.: 02(9)

<u>AIM</u>: Write a program to create a delegate called TrafficDel and a class called TrafficSignal with the following delegate methods.

```
Public static void Yellow()
{
Console.WriteLine("Yellow Light Signal To Get Ready");
}
Public static void Green()
{
Console.WriteLine("Green Light Signal To Go");
}
Public static void Red()
{
Console.WriteLine("Red Light Signal To Stop");
}
```

Also include a method IdentifySignal() to initialize an array of delegate with the above methods and a method show() to invoke members of the above array.

CODE:

```
TrafficSignal.cs
using System;
namespace TrafficDelegateExample
{
    public delegate void TrafficDel();
    class TrafficSignal
    {
        public static void Yellow()
        {
            Console.WriteLine("Yellow light signals to get ready");
        }
        public static void Green()
        {
             Console.WriteLine("Green light signals to go");
        }
        public static void Red()
        {
             Console.WriteLine("Red light signals to stop");
        }
        TrafficDel[] td = new TrafficDel[3];
        public void IdentifySignal()
        {
             td[0] = new TrafficDel(Yellow);
            td[1] = new TrafficDel(Green);
        }
}
```

td[2] = new TrafficDel(Red);

```
}
public void display()
{
    td[0]();
    td[1]();
    td[2]();
}
}
```

Program.cs

```
using System;
namespace TrafficDelegateExample
{
    class Program
    {
        static void Main(string[] args)
          {
            TrafficSignal ts = new TrafficSignal();
            ts.IdentifySignal();
            ts.display();
        }    }
}
```

OUTPUT:

Yellow light signals to get ready Green light signals to go Red light signals to stop

PRACTICAL NO.: 02(10)

<u>**AIM**</u>: Write a program to accept a number from the user and throw an exception if the number is not an even number.

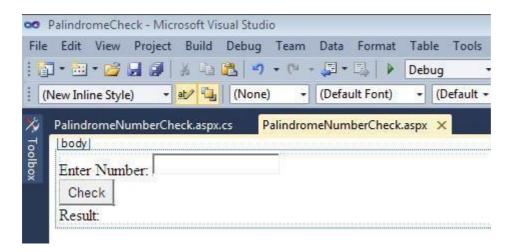
CODE:

```
NotEvenException.cs
using System;
namespace ExceptionHandlingExample
  class NotEvenException:Exception
    public NotEvenException(string msg)
       : base(msg)
} }
Program.cs
using System;
namespace ExceptionHandlingExample
  class Program
    static void Main(string[] args)
       int num;
       try
         Console. Write("Enter a number: ");
         num = int.Parse(Console.ReadLine());
         if ((num % 2) != 0) throw new NotEvenException("Not an even number ");
         else
           Console. WriteLine("Its even number");
       catch (NotEvenException e) { Console.WriteLine(e.Message); }
    } } }
OUTPUT:
Enter a number: 5
Not an even number
Enter a number: 6
Its even number
```

PRACTICAL NO.: 03(1)

<u>AIM</u>: Create an application that allows the user to enter a number in the textbox named "getnum". Check whether the number in the textbox "getnum" is palindrome or not. Print the message accordingly in the label control named lbldisplay when the user clicks on the button "check".

DESIGN:



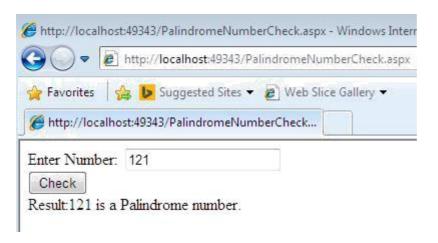
PROPERTIES TABLE:

Control	Property	Value	
Label1	Text	Enter Number	
	ID	lblnum1	
TextBox	ID	getNum	
Button	Text	Check	
	ID	btncheck	
<u>Label2</u>	<u>Text</u>	Result	
	ID	lblnum2	

CODE:

```
n = num;
while (n > 0)
{
    d = n % 10;
    n = n / 10;
    rev = rev * 10 + d;
}
if (rev == num)

lblnum2.Text = lblnum2.Text + num + " is a Palindrome
number."; else
    lblnum2.Text = lblnum2.Text + num + " is not a Palindrome number.";
} }
}
```



PRACTICAL NO. : 03(2)

<u>AIM</u>: Create an application which will ask the user to input his name and a message, display the two items concatenated in a label, and change the format of the label using radio buttons and check boxes for selection, the user can make the label text bold, underlined or italic and change its color . include buttons to display the message in the label, clear the text boxes and label and exit.

DESIGN:



PROPERTIES TABLE:

Control	Property	Value
Label1	ID	lb11
	Text	Enter Name
Checkbox1	ID	chkbold
	Text	BOLD
Checkbox2	ID	chkitalic
	Text	ITALIC
Checkbox3	ID	chkunderline
	Text	UNDERLINE
RadioButton1	ID	rbred
	Text	RED
RadioButton2	ID	rbgreen
	Text	GREEN
RadioButton3	ID	rbpink
	Text	PINK
Label2	ID	txtmessage
	Text	Enter Message
Button	ID	btndisplay
	Text	Display
Label3	ID	lblDisplay
	Text	Label3

```
CODE:
using System;
namespace DisplayMessage
  public partial class DisplayTheMessage: System.Web.UI.Page
    protected void Page_Load(object sender, EventArgs e)
    protected void btndisplay_Click(object sender, EventArgs e)
       if (chkbold.Checked == true)
         lblDisplay.Font.Bold = true;
       else
         lblDisplay.Font.Bold = false;
       if (chkitalic.Checked == true)
         lblDisplay.Font.Italic = true;
       else
         lblDisplay.Font.Italic = false;
       if (chkunderline.Checked == true)
         lblDisplay.Font.Underline = true;
       else
         lblDisplay.Font.Underline = false;
       if (rbred.Checked == true)
         lblDisplay.ForeColor = System.Drawing.Color.Red;
       else if(rbgreen.Checked == true)
         lblDisplay.ForeColor = System.Drawing.Color.Green;
       else if (rbpink.Checked == true)
         lblDisplay.ForeColor = System.Drawing.Color.Pink;
       lblDisplay.Text = "Name:" + txtName.Text + "<br/>br/>" + "Message:" +
txtMessage.Text;
```

BROWSER OUTPUT:

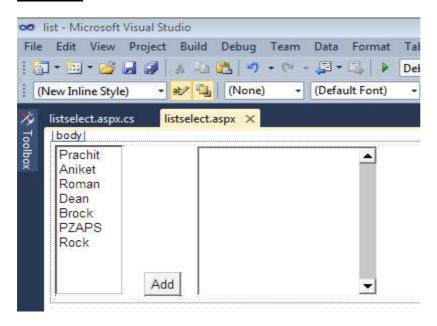
} } }



PRACTICAL NO.: 03(3)

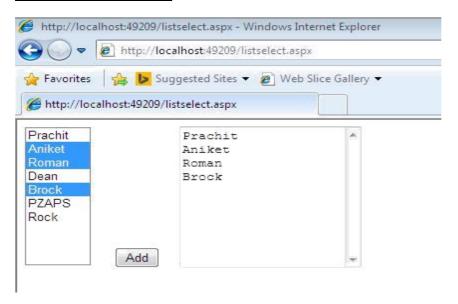
<u>AIM</u>: List of employees is available in listbox. Write an application to add selected or all records from listbox (assume multi-line property of textbox is true).

DESIGN:



PROPERTIES TABLE:

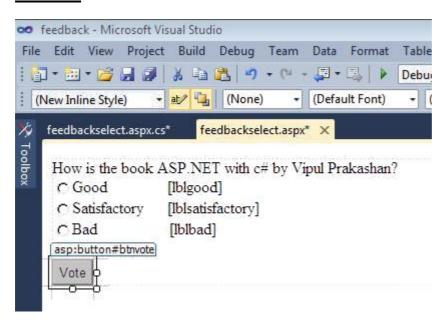
CODE:



PRACTICAL NO. : 03(4)

<u>AIM</u>: "How is the book ASP.NET with c# by Vipul Prakashan?" Give the user three choice: i)Good ii)Satisfactory iii)Bad. Provide a VOTE button. After user votes, present the result in percentage using labels next to the choices.

DESIGN:

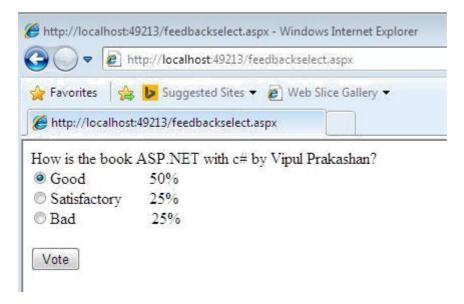


PROPERTIES TABLE:

Control	Property	Value	
Label1	ID	lbltxt1	
	Text	How is the Book ASP.NET	
		with c# Vipul Prakashan	
RadioButton1	ID	rdogood	
	Text	Good	
RadioButton2	ID	rdosatisfactory	
	Text	Satisfactory	
RadioButton3	ID	rdobad	
	Text	Bad	
Label2	ID	lblgood	
	Text		
Label3	ID	lblsatisfactory	
	Text		
Label4	ID	lblbad	
	Text		
Button	ID	btnvote	
	Text	Vote	

```
CODE:
```

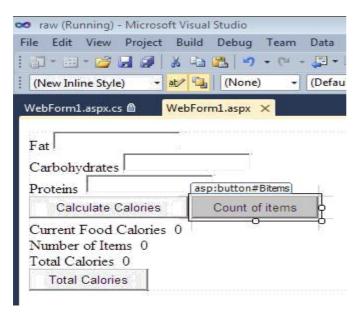
```
using System;
namespace feedback
  public partial class feedbackselect: System. Web. UI. Page
    protected void Page_Load(object sender, EventArgs e)
    protected void btnvote_Click(object sender, EventArgs e)
       if (rdogood.Checked == true)
         int goodCount;
         if (ViewState["gcount"] != null)
            goodCount = Convert.ToInt32(ViewState["gcount"]) + 1;
            goodCount = 1;
         ViewState["gcount"] = goodCount;
       if (rdosatisfactory.Checked == true)
         int satisfactoryCount;
         if (ViewState["scount"] != null)
            satisfactoryCount = Convert.ToInt32(ViewState["scount"]) + 1;
         else
            satisfactoryCount = 1;
         ViewState["scount"] = satisfactoryCount;
       if (rdobad.Checked == true)
         int badCount;
         if (ViewState["bcount"] != null)
            badCount = Convert.ToInt32(ViewState["bcount"]) +
         1; else
            badCount = 1;
         ViewState["bcount"] = badCount;
       int totalCount;
       if (ViewState["count"] != null)
         totalCount = Convert.ToInt32(ViewState["count"]) +
       1: else
         totalCount = 1;
       ViewState["count"] = totalCount;
       double gper = (Convert.ToDouble(ViewState["gcount"]) /
Convert.ToDouble(ViewState["count"])) * 100.0f;
```



PRACTICAL NO. : 03(5)

<u>AIM</u>: Create a project that calculates the total of fat, carbohydrate and protein. Allow the user to enter into text boxes. The grams of fat, grams of carbohydrate and grams of protein. Each gram of fat is 9 calories and protein or carbohydrate is 4 calories. Display the total calories of the current food item in a label. Use to other labels to display and accumulated some of calories and the count of items entered. The form food have 3 text boxes for the user to enter the grams for each category include label next to each text box indicating what the user is enter.

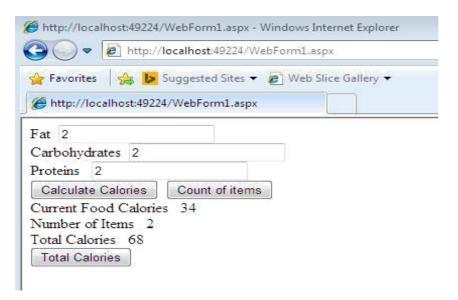
DESIGN:



PROPERTIES TABLE:

CODE:

```
lbltc.Text = Convert.ToString(total_items);
}
protected void Bitems_Click(object sender, EventArgs e)
{
    lblnof.Text = Convert.ToString(Convert.ToInt32(lblnof.Text) + 1);
}
protected void Btotalcalo_Click(object sender, EventArgs e)
{
    lbltc.Text = Convert.ToString(Convert.ToInt32(lbltc.Text) +
Convert.ToInt32(lblcfc.Text));
}
}
```



PRACTICAL NO. : 04(1)

AIM: Set the label border color of rollno to red using css.

DESIGN:

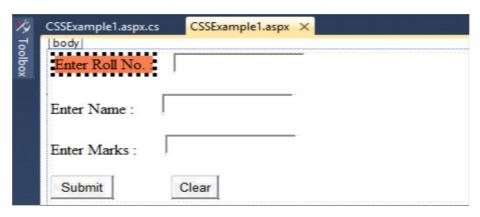
StyleSheet1.css	WebForm1.aspx* → X	
body		
Enter Roll	No.:	
Enter Name	:	
Enter Mark	s:	
Subn	it Clear	

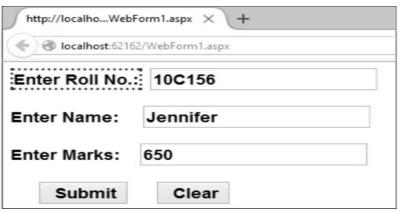
PROPERTY TABLE:

Control	Property	Value
Label1	ID	lblRollNo
Label1	Text	Enter Roll No.
Label1	BorderStyle	Dotted
Label1	BackColor	Coral
Label2	ID	lblName
Label2	Text	Enter Name
Label3	ID	lblMarks
Label3	Text	Enter Marks
TextBox1	ID	txtRollNo
TextBox2	ID	txtName
TextBox3	ID	txtMarks
Button1	ID	btnSubmit
Button1	Text	Submit

CODE:

```
</head>
<body>
  <form id="form1" runat="server">
  <div>
    <asp:Label ID="Label1" runat="server" Text="Enter Roll No.:"</pre>
BorderStyle="Dotted" BackColor="Coral"></asp:Label>
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
    <br />
    <asp:Label ID="Label2" runat="server" Text="Enter
    Name:"></asp:Label> <asp:TextBox ID="TextBox2"
    runat="server"></asp:TextBox> <br/>
    <asp:Label ID="Label3" runat="server" Text="Enter
    Marks:"></asp:Label> <asp:TextBox ID="TextBox3"
    runat="server"></asp:TextBox> <br />
    <asp:Button ID="Button1" runat="server" Text="Submit" />
       
    <asp:Button ID="Button2" runat="server" Text="Clear" />
  </div>
  </form>
</body>
</html>
```





PRACTICAL NO.: 04(2)

 $\underline{\textbf{AIM}} : Set \ the \ font-Arial \ , \ font \ style-bond \ , \ font \ size-18px \ of \ different \ controls (ie. Label, textbox, button) \ using \ css.$

DESIGN:

-	CSSExample1.aspx.cs*	CSSExample1.aspx*	- 3
[oolbox	Enter Roll No.:		
	Enter Name :		
	Enter Marks:		
	Submit	Clear	

PROPERTY TABLE:

Control	Property	Value
Label1	ID	lblRollNo
Label1	Text	Enter Roll No.
Label1	BorderStyle	Dotted
Label1	BackColor	Coral
Label2	ID	lblName
Label2	Text	Enter Name
Label2	CssClass	Common
Label3	ID	lblMarks
Label3	Text	Enter Marks
Label3	CssClass	Common
TextBox1	ID	txtRollNo
TextBox1	CssClass	Txt Style
TextBox2	ID	txtName
TextBox2	CssClass	Txt Style
TextBox3	ID	txtMarks
TextBox3	CssClass	Txt Style
Button1	ID	btnSubmit
Button1	Text	Submit
Button1	CssClass	btnStyle
Button2	ID	btnClear
Button2	Text	Clear
Button2	CssClass	btnStyle

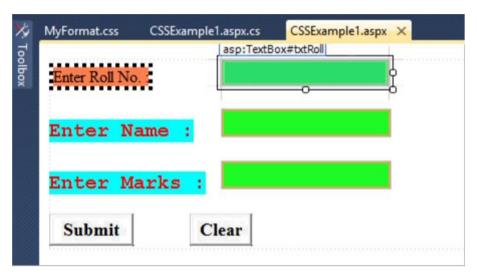
CODE:

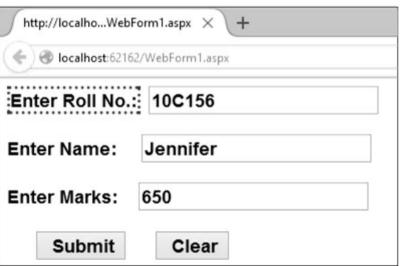
```
Myformat.css
.BtnStyle
font-family: Times New Roman;
font-size:large;
font-weight:bold;
}
.TxtStyle
font-family:Georgia;
font-size:larger;
font-weight:400;
background-color:Maroon;
border:2px solid goldenrod;
.Common
background-color:Aqua;
color:Red;
font-family: Courier New;
font-size:20px;
font-weight:bolder;
```

Myformatting.aspx

```
<%@ Page Language="C#" AutoEventWireup="true"
CodeBehind="cssexample.aspx.cs" Inherits="practical4css.cssexample" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
<body>
<form id="form1" runat="server">
<div>
<asp:Label ID="Label1" runat="server" Text="Enter Roll No.:" BorderStyle="Dotted"
BackColor="Coral"></asp:Label>
<asp:TextBox ID="TextBox1" runat="server"</pre>
CssClass="TxtStyle"></asp:TextBox> <br />
<asp:Label ID="Label2" runat="server" Text="Enter Name:"</pre>
CssClass="Common"></asp:Label>
<asp:TextBox ID="TextBox2" runat="server"</pre>
CssClass="TxtStyle"></asp:TextBox> <br />
```

```
<asp:Label ID="Label3" runat="server" Text="Enter Marks:"
CssClass="Common"></asp:Label>
<asp:TextBox ID="TextBox3" runat="server" CssClass="TxtStyle"></asp:TextBox>
<br/>
<br/>
<br/>
<asp:Button ID="Button1" runat="server" Text="Submit" CssClass="BtnStyle" />
<asp:Button ID="Button2" runat="server" Text="Clear" CssClass="BtnStyle" />
</div>
</div>
</div>
</body>
</html>
```





PRACTICAL NO.: 04(3)

<u>AIM</u>: Design the same webpages for BMS, BAF, BscIT students and apply same background color for all the pages using css.

Bsc IT	N L
BAF	
<u>BMS</u>	
Contact us	

PROPERTY TABLE:

Control	Property	Value
Label1	ID	lblBScIT
Label1	Text	Welcome to BScIT
Label1	CssClass	bk

Control	Property	Value	
Label1	ID	lblBAF	
Label1	Text	Welcome to BMS	
Label1	CssClass	bk	

Control	Property	Value
Label1	ID	lblBMS
Label1	Text	Welcome to BAF
Label1	CssClass	bk

CODE:

```
Myformat.css
```

```
.BtnStyle {
font-family:Times New Roman;
font-size:large;
font-weight:bold;
}
.TxtStyle {
font-family:Georgia;
font-size:larger;
font-weight:400;
background-color:Lime;
border:2px solid goldenrod;
}
.Common {
```

```
background-color: Aqua;
color:Red;
font-family: Courier New;
font-size:20px;
font-weight:bolder;
.bk
background-color:Lime;
BScIT.aspx
<% @ Page Language="C#" AutoEventWireup="true"
CodeBehind="BScIT.aspx.cs" Inherits="cssExample.BScIT" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
  k rel="Stylesheet" type="text/css" href="MyFormat.css"/>
</head>
<body text="Welcome to BScIT">
  <form id="form1" runat="server">
  <div class="bk">
    <asp:Label ID="lblBScIT" runat="server" Text="Welcome to BscIT"></asp:Label>
  </div>
  </form>
</body>
</html>
BAF.aspx
<% @ Page Language="C#" AutoEventWireup="true"
CodeBehind="BAF.aspx.cs" Inherits="cssExample.BAF" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
  k rel="Stylesheet" type="text/css" href="MyFormat.css" />
</head>
<body>
  <form id="form1" runat="server">
  <div class="bk">
    <asp:Label ID="lblBAF" runat="server" Text="Welcome to BAF"></asp:Label>
  </div>
  </form>
</body>
```

ASP.NET WITH C# </html> **BMS.aspx** <%@ Page Language="C#" AutoEventWireup="true" CodeBehind="BMS.aspx.cs" Inherits="cssExample.BMS" %> <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"> <head runat="server"> <title></title> link rel="Stylesheet" type="text/css" href="MyFormat.css" /> </head> <body> <form id="form1" runat="server" class="bk"> <asp:Label ID="lblBMS" runat="server" Text="Welcome to BMS"></asp:Label> </form> </body> </html> **CSSExample1.aspx:** <%@ Page Language="C#" AutoEventWireup="true" CodeBehind="CSSExample1.aspx.cs"</p> Inherits="cssExample.CSSExample1" %> <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p> "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"> <html xmlns="http://www.w3.org/1999/xhtml"> <head runat="server"> <title></title> link rel="Stylesheet" type="text/css" href="MyFormat.css" /> </head> <body> <form id="form1" runat="server"> <div> <asp:Label ID="lblRollNo" runat="server" Text="Enter Roll No. :" BorderStyle="Dotted"</pre> BackColor="Coral"></asp:Label> p; <asp:TextBox ID="txtRoll" runat="server" CssClass="TxtStyle"></asp:TextBox>

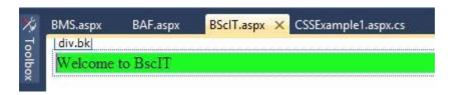
 <asp:Label ID="lblName" runat="server" Text="Enter Name" :" CssClass="Common"></asp:Label>

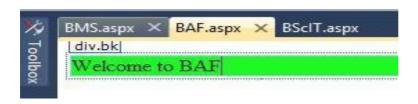
<asp:TextBox ID="txtName" runat="server" CssClass="TxtStyle"></asp:TextBox>
>
/>

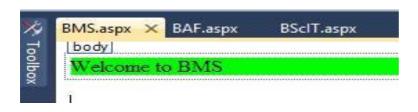

```
<asp:Label ID="lblMarks" runat="server" Text="Enter Marks :"
CssClass="Common"></asp:Label>
      
   <asp:TextBox ID="txtMarks" runat="server" CssClass="TxtStyle"></asp:TextBox>
   <br />
   <br />
   <asp:Button ID="btnSubmit" runat="server" onclick="btnSubmit_Click"
     Text="Submit" CssClass="BtnStyle" />
         
   <asp:Button ID="btnClear" runat="server" Text="Clear" CssClass="BtnStyle"/>
   <br>
   <br>
   <br>
 <h1><a href="BScIT.aspx"</a>Bsc IT</h1>
 <h2><a href = "BAF.aspx" </a>BAF</h2>
 <h3><a href ="BMS.aspx"</a>BMS</h3><a
 href="http://www.vsit.edu.in/"> Contact
 us</a>
 </div>
 </form>
</body>
</html>
```

OUTPUT:



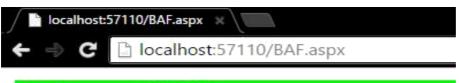




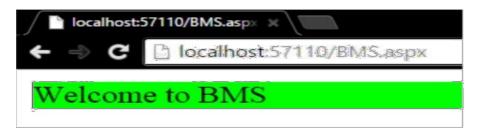








Welcome to BAF





PRACTICAL NO.: 04(4)

AIM: Change the font family and color of all heading of above webpage using css.

DESIGN:

BAF.aspx CONT	ACT.aspx Styl	eSheet2.css	BMS.aspx
Enter Roll No			
Enter Name:			
Enter Marks:		,	
Submit	Clear		
BSC IT			
BAF			
<u>BMS</u>			
Contact us			
l			

CODE:

myformating.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="myformatting.aspx.cs"
Inherits="WebApplication1.myformatting" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
link rel="Stylesheet" type="text/css" href="MyFormat.css"
/> <style type="text/css">
h1,h2,h3{color:Blue; font-family:Agency FB;}
</style>
</head>
```

```
ASP.NET WITH C#
<body>
<form id="form1" runat="server">
<div>
<asp:Label ID="Label1" runat="server" Text="Enter Roll No.:" BorderStyle="Dotted"
BackColor="Coral"></asp:Label>
<asp:TextBox ID="TextBox1" runat="server" CssClass="TxtStyle"></asp:TextBox>
<br >
<asp:Label ID="Label2" runat="server" Text="Enter Name:"
CssClass="Common"></asp:Label>
<asp:TextBox ID="TextBox2" runat="server"</pre>
CssClass="TxtStyle"></asp:TextBox> <br />
<asp:Label ID="Label3" runat="server" Text="Enter Marks:"</pre>
CssClass="Common"></asp:Label>
<asp:TextBox ID="TextBox3" runat="server" CssClass="TxtStyle"></asp:TextBox>
<br/>br />
<br />
<asp:Button ID="Button1" runat="server" Text="Submit" CssClass="BtnStyle"
/> <asp:Button ID="Button2" runat="server" Text="Clear" CssClass="BtnStyle"
/> <h1><a href="bscit.aspx"</a>Bsc IT</h1> <h2><a href
="baf.aspx"</a>BAF<math></h2>
<h3><a href="bms.aspx"</a>BMS</h3>
<a href="http://www.vsit.edu.in/">
Contact us</a>
<br />
<br />
<br />
<br/>br />
</div>
```

BROWSER OUTPUT:

</form> </body> </html>



PRACTICAL NO.: 04(5)

<u>**AIM**</u>: Use pseudo classes and display link, visited link and active link of <u>contact</u> <u>us</u> differently.

DESIGN:



CODE:

myformatting.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="myformatting.aspx.cs"
Inherits="WebApplication1.myformatting" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
<title></title>
<link rel="Stylesheet" type="text/css" href="MyFormat.css"</pre>
/> <style type="text/css">
h1,h2,h3{color:Blue; font-family:Agency FB;}
A:link{color:Red;}
A:visited{color:Green;}
A:active{color:Orange;}
</style>
</head>
<body>
<form id="form1" runat="server">
<div>
<asp:Label ID="Label1" runat="server" Text="Enter Roll No.:" BorderStyle="Dotted"
BackColor="Coral"></asp:Label>
```

```
<asp:TextBox ID="TextBox1" runat="server"</pre>
CssClass="TxtStyle"></asp:TextBox> <br />
<asp:Label ID="Label2" runat="server" Text="Enter Name:"
CssClass="Common"></asp:Label>
<asp:TextBox ID="TextBox2" runat="server"</pre>
CssClass="TxtStyle"></asp:TextBox> <br />
<asp:Label ID="Label3" runat="server" Text="Enter Marks:"
CssClass="Common"></asp:Label>
<asp:TextBox ID="TextBox3" runat="server"</pre>
CssClass="TxtStyle"></asp:TextBox> <br/> <br/>
<asp:Button ID="Button1" runat="server" Text="Submit" CssClass="BtnStyle"
/> <asp:Button ID="Button2" runat="server" Text="Clear" CssClass="BtnStyle"
/> <h1><a href="bscit.aspx"</a>Bsc IT</h1> <h2><a href
="baf.aspx"</a>BAF<math></h2>
<h3><a href ="bms.aspx"</a>BMS</h3>
<a href="http://www.vsit.edu.in/">
Contact us</a>
<br /><br /><br />
</div>
</form>
</body>
</html>
```

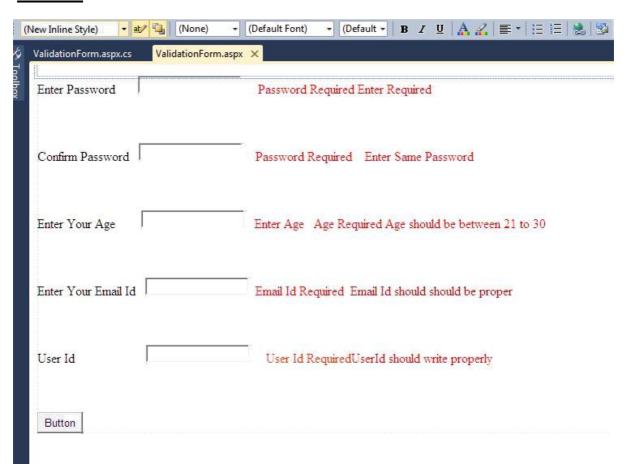


PRACTICAL NO.: 05(1)

<u>AIM</u>: Programs using ASP.NET Server controls.

Create the application that accepts name, password ,age , email id, and user id. Allthe information entry is compulsory. Password should be reconfirmed. Age should be within 21 to 30. Email id should be valid. User id should have at least a capital letter and digit as well as length should be between 7 and 20 characters.

DESIGN:

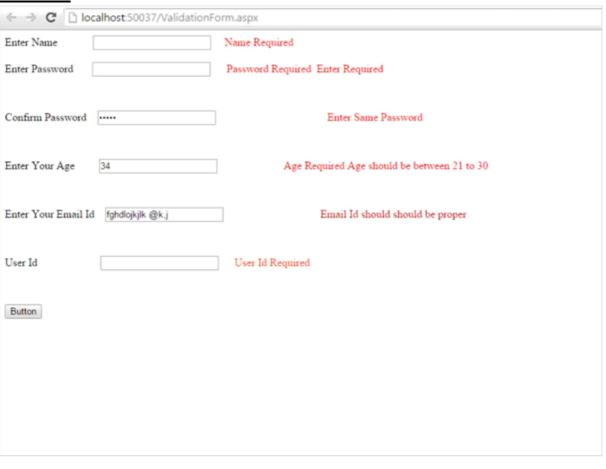


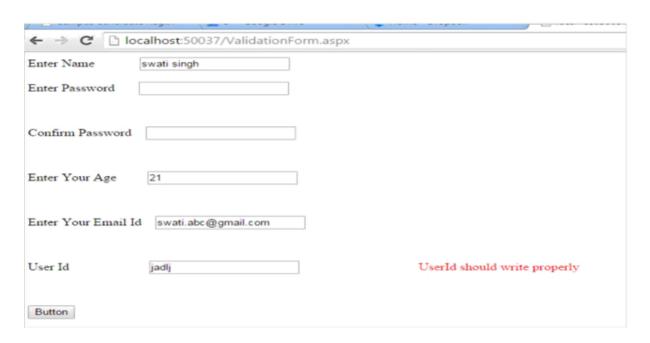
CODE:

ValidateControlForm.aspx

```
protected void CustomValidator1_ServerValidate(object
source, ServerValidateEventArgs args)
        string str = args.Value;
        args.IsValid = false;
        if (\text{str.Length} < 7 \parallel \text{str.Length} > 20)
          return;
        bool capital = false;
        foreach (char ch in str)
          if (ch >= 'A' && ch <= 'Z')
             capital = true;
             break;
        if (!capital)
          return;
        bool digit = false;
        foreach (char ch in str)
          if (ch >= '0' \&\& ch <= '9')
             digit = true;
             break;
        if (!digit)
          return;
        args.IsValid = true;
     protected void btnSubmit_Click(object sender, EventArgs e)
     } }
```

OUTPUT:





Campus Candidate	Regist × S Gmail	x W Home - Dropbox
← → C 🗋 localhost:50037/ValidationForm.aspx		
Enter Name	swati singh	
Enter Password		
Confirm Password		
Enter Your Age	21	
Enter Your Email Id	swati.abc@gmail.com	
User Id	Swati21	
OSEI IU	Swatt2 I	
Button		

PRACTICAL NO.: 05(2)

<u>AIM</u>: Programs using ASP.NET Server controls.

Create a website for a bank and include types of navigation.

DESIGN:



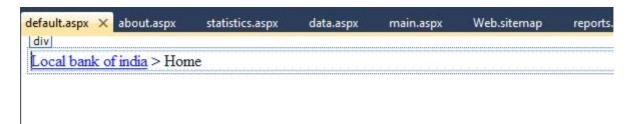
CODE:

Web.sitemap

```
<?xml version="1.0" encoding="utf-8" ?>
<siteMap xmlns="http://schemas.microsoft.com/AspNet/SiteMap-File-1.0" >
  <siteMapNode url="~\" title="Local bank of india" description="Online Banking">
   <siteMapNode url="default.aspx" title="Home" description="Go to the homepage"
   /> <siteMapNode url="about.aspx" title="About Us" description="About us"/>
   <siteMapNode url="statistics.aspx" title="Statistics" description="Statistics">
    <siteMapNode url="data.aspx" title="Data Releases" description="Data Releases"/>
    <siteMapNode url="database.aspx" title="Database on Indian Economy"
description="Economy of India"/>
    <siteMapNode url="service.aspx" title="Service" description="Service Information"/>
    </siteMapNode>
    <siteMapNode url="publications.aspx" title="Publications"
     description="Publications"> <siteMapNode url="annual.aspx" title="Annual"
     description="Annual"/> <siteMapNode url="monthly.aspx" title="Monthly"
     description="Monthly"/> <siteMapNode url="reports.aspx" title="Reports"
     description="Reports"/> </siteMapNode>
     </siteMapNode>
</siteMap>
```

OUTPUT: (sitemap)





OUTPUT: (Website form Tree view Controls)





PRACTICAL NO.: 06(1)

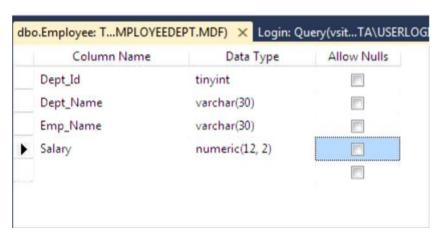
AIM: Database programs with ASP.NET and ADO.NET.

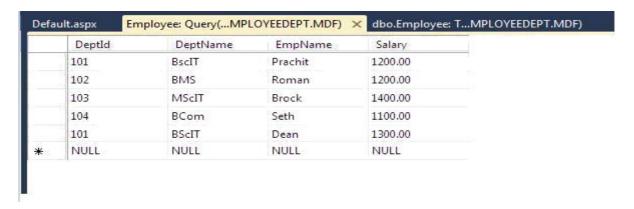
Create a Web App to display all the Empname and Deptid of the employee from the database using SQL source control and bind it to GridView . Database fields are(DeptId, DeptName, EmpName, Salary).

Steps: e w 1. Fil ne website empty website name it ok 2. de a s e na a Right click on website ma dd new item ql server databas me itdd es 3. Right click on table In server explorer add new table add columns save the table 5. Right click on website add new item webform name it 6. Go to design view 7. Add a gridview below that add sqldatasource 8. Configure sqldatasource then add it to the gridview 9. Go to gridview menu enable sorting

DESIGN:







OUTPUT:

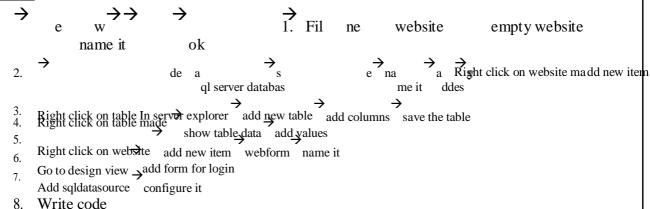
Deptid	Empname	
1	swati	
2	natasha	
3	thor	
4	max	
5	mahi	

PRACTICAL NO.: 06(2)

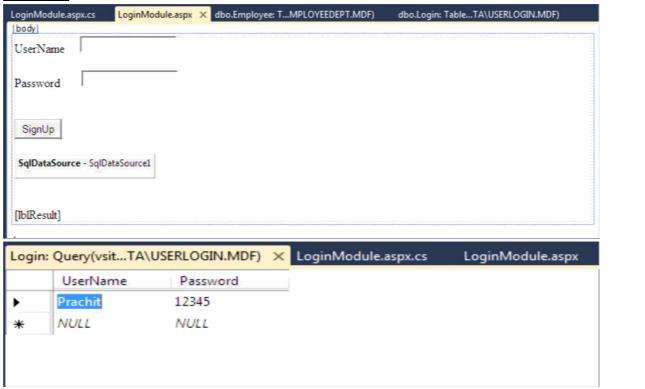
AIM: Database programs with ASP.NET and ADO.NET

Create a Login Module which adds Username and Password in the database. Username in the database should be a primary key.

Steps2:



DESIGN:



CODE:

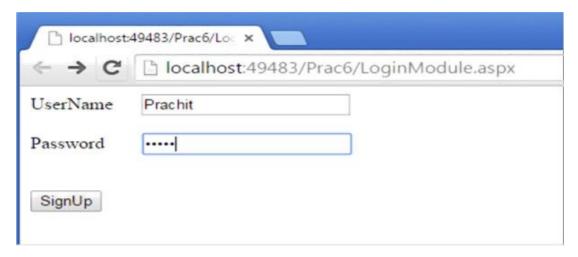
LoginModule.aspx

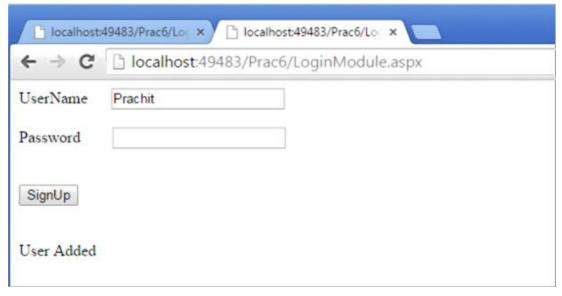
using System; using System.Collections.Generic; using System.Linq;

using System.Web;

```
using System.Web.UI;
using System.Web.UI.WebControls;
public partial class LoginModule : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        protected void btnSignUp_Click(object sender, EventArgs e)
        {
            SqlDataSource1.InsertParameters["Username"].DefaultValue = txtUserName.Text;
            SqlDataSource1.InsertParameters["Password"].DefaultValue = txtPassword.Text;
            SqlDataSource1.Insert();
            lblResult.Text = "User Added";
        }
}
```

OUTPUT:





PRACTICAL NO.: 06(3)

AIM: Database programs with ASP.NET and ADO.NET

Create a web application to insert 3 records inside the SQL database table having following fields (DeptId, DeptName, EmpName, Salary). Update the salary for any one employee and increment it to 15% of the present salary. Perform delete operation on 1 row of the database table.

Steps:

9. File new website empty website name it ok

10. Right click on website made add new item sql server database name it add yes

11. Right click on table In server explorer add new table add columns save the table show table data add values

13. Right click on website add new item webform name it

14. Go to design view add necessary form

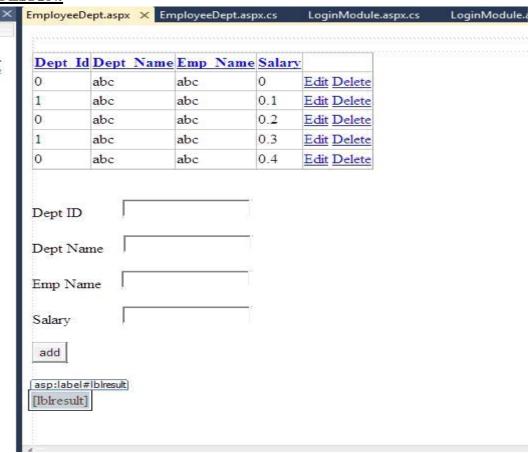
15. Add a grid view below the form below that add sqldatasource

16. Configure sqldatasource then add it to the gridview

17. Go to grid view menu add columns select command field check on delete and edit ok

10. Double click on button write code.

DESIGN:

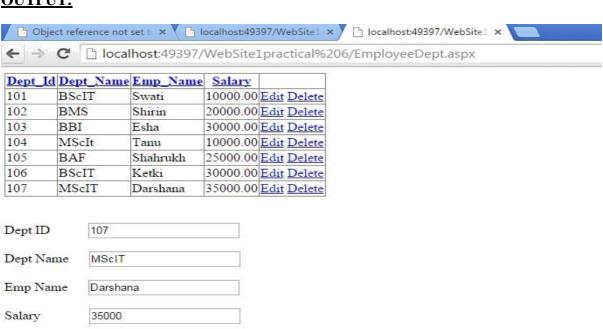


CODE:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

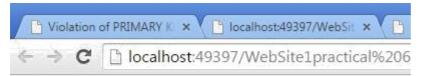
public partial class LoginModule : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        }
        protected void btnSignUp_Click(object sender, EventArgs e)
    {
            SqlDataSource1.InsertParameters["Username"].DefaultValue = txtUserName.Text;
            SqlDataSource1.InsertParameters["Password"].DefaultValue = txtPassword.Text;
            SqlDataSource1.Insert();
            Textbox1.Text=""";
            Textbox2.Text=""";
            }
}
```

OUTPUT:



User Added

add



Dept_Id	Emp_Name	command
101	Swati	Edit Delete
102	Shirin	Edit Delete
103	Esha	Edit Delete
104	Shiwani	Edit Delete
105	Shahrukh	Edit Delete
106	Ketki	Edit Delete

PRACTICAL NO.: 07(1)

<u>AIM</u>: Programs using Language Integrated query. Create the table with the given fields. FIELD NAME DATA TYPE EmpNo number EmpName varchar EmpSal number EmpJob varchar EmpDeptNo number

For the given table design a web page to display the employee information from table to grid control. Use LINQ TO ADO.NET.

STEPS:

- 1. File new Website Empty Website name it Add
 2. Right click on website on solution explorer

 Add new item Sql server

 database name it add yes

 3. Server Explorer table right click add new table enter the columns save the table

 4. Server explorer right click on table which is made show table data add values

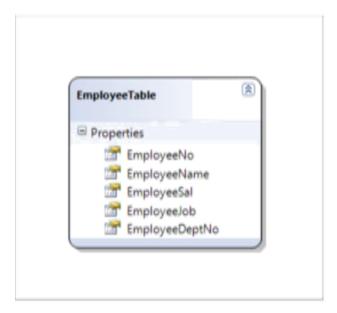
 5. Server explorer right click on website created add new item web form name it
- 6. Go to design view of aspx page add grid view from toolbox.

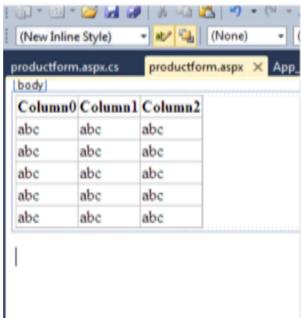
 Double click on aspx page.

DESIGN:

Default.aspx.cs	Default.aspx	App_Code/Emp	oloyee.dbml	EmployeeTab
Column	n Name	Data Type	Allow Nulls	
▶ ¶ EmpNo		tinyint		
EmpName		varchar(50)		
EmpSal		numeric(12, 2)		
EmpJob		varchar(50)		
EmpDeptNo		tinyint	[PP]	
			177	







CODE:

Default.aspx.cs

```
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Data.Linq;
using System.Data.SqlClient;
using System.Web.UI.WebControls;
public partial class _Default : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        EmployeeDataContext dc = new EmployeeDataContext();
        var query = from m in dc.EmployeeTables select m;

        GridView1.DataSource = query;
        GridView1.DataBind();
    }
}
```

OUTPUT:

← → C 🗋 localhost:49428/WebSite1LingToADO.NET/Default.aspx

EmployeeNo	EmployeeName	EmployeeSal	EmployeeJob	EmployeeDeptNo
1	Swati	10000.00	HR	10
2	Shirin	25000.00	Manager	11
3	Shiwani	15000.00	MD	12
4	Esha	50000.00	CEO	13
5	Prince	5000.00	programmer	14
15	Ankita	1000.00	Clerk	17

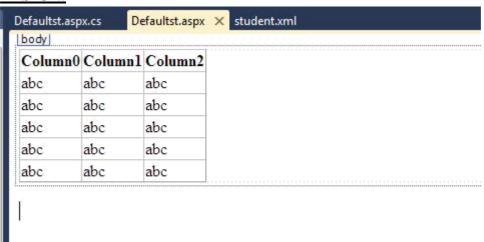
PRACTICAL NO.: 07(2)

<u>AIM</u>: Programs using Language Integrated query. Create the table with the given fields. FIELD NAME DATA TYPE SRollno int SName string SAddress string SFees int

For the given table design a web page to display the employee information from table to grid control. Use LINQ TO XML.

STEPS:

- File New website Empty Website name it
 Solution Explorer right click on website made add new item XML file name it add write code
 Solution explorer right click on website add new item webform name it add
 Go to design view double click page write code.
- **DESIGN:**

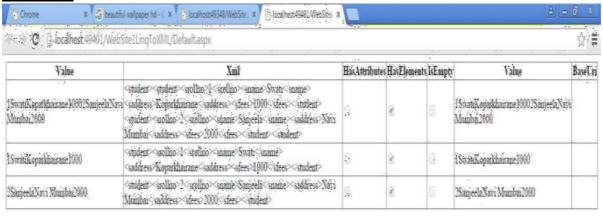


CODE:

student.xml

```
<saddress>Dadar</saddress>
  <sfees>3000</sfees>
 </student>
</TYStudents>
Defaultst.aspx.cs
using System;
using System.Collections.Generic;
using System.Ling;
using System.Web;
using System.Web.UI;
using System.Xml.Ling;
using System.Web.UI.WebControls;
public partial class Defaultst: System.Web.UI.Page
  protected void Page Load(object sender, EventArgs e)
    XDocument xmlDoc =
XDocument.Load(HttpContext.Current.Server.MapPath("student.xml"));
    var studs = from s in xmlDoc.Descendants("student")
           select s:
    GridView1.DataSource = studs;
    GridView1.DataBind();
}
```

OUTPUT:



PRACTICAL NO. : 07(3)

<u>AIM</u>: Programs using Language Integrated query. Create the table with the given fields.

FIELD NAME DATA TYPE PID string PName string PPrice int PWeight int

For the given table design a web page to display the employee information from table to grid control. Use LINQ TO Objects.

Double click on page

write code.

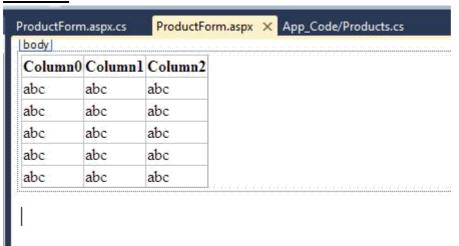
STEPS:

```
1. File new website name it
2. Solution explorer right click on website made class name it yes write code
3. Solution explorer right click on website add new item webform name it add
```

add GridView

DESIGN:

4. Go to design view



CODE:

App_Code/Products.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
public class Products
{
public string PID { get; set; }
  public string PName { get; set; }
  public int PPrice { get; set; }
  public int PWeight { get; set; }
```

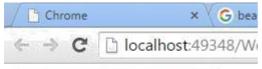
```
public Products()
{
} }
ProductForm.aspx.cs
```

```
using System;
```

```
using System.Collections.Generic;
using System.Linq;
using System. Web;
using System. Web. UI;
using System.Web.UI.WebControls;
public partial class ProductForm: System.Web.UI.Page
  public List<Products> GetProdData()
    return new List<Products> {
         new Products { PID="P101", PName="Laptop", PPrice=25000, PWeight=1500},
         new Products { PID="P102", PName="Desktop", PPrice=22000, PWeight=8000},
         new Products { PID="P103", PName="Mouse", PPrice=500, PWeight=250}
      };
  }
  protected void Page_Load(object sender, EventArgs e)
    var prod = GetProdData();
    var query = from f in prod
           orderby f.PName
           select f;
    this.GridView1.DataSource = query;
    this.GridView1.DataBind();
  }
```

OUTPUT:

}



PID	PName	PPrice	PWeight
P102	Desktop	15000	1000
P101	Laptop	25000	1500
P103	Mouse	25000	1500

PRACTICAL NO.: 08

<u>AIM:</u> (A) For the web page created for the display OF Employee data change the authentication mode to Windows

CODE:

```
<system.web>
<authentication mode="Windows">
<forms loginUrl="~/"Prac8/EmployeeForm.aspx">
</authentication>
</system.web</pre>
```

Steps for changing the authentication mode

- 1. Open the website created for displaying the Employee data
- 2. From the solution Explorer window open the web.config file
- 3 .In the web.config file search the <system.web> xml tag and in <system.web> xml tag go to authentication tag
- 4. Change the authentication mode to windows as given above.

<u>AIM:</u> (B) For the webpage created for the display of Student data change the authorization mode so that only users who have logged in as VSIT will have the authority to aces the page

CODE:

```
<system.web>
<authentication>
<allow users="VSIT"/>
<deny users =" *"/>
</authentication>
</system.web>
```

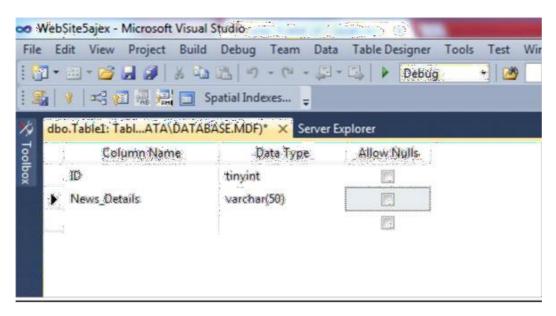
Steps for changing the authorization

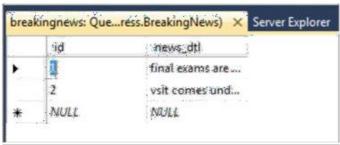
- 1. Open the website created for displaying the Student data
- 2. From the solution Explorer window open the web.config file
- 3. In the Web.config file search the <system.web> xml tag and in <system.web> xml tag go to authentication tag
- 4. Change the coding in the tag as given above

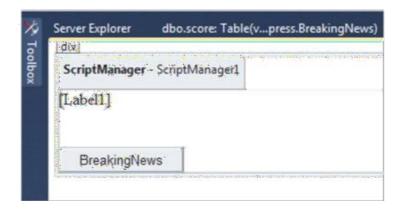
PRACTICAL NO: 9(A)

AIM: Create a web page to display the news from the news table(id, news_dtl). Use AJAX.

DESIGN:



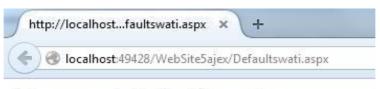




CODE:

```
using System;
usingSystem.Collections.Generic;
usingSystem.Linq;
usingSystem.Web;
usingSystem.Web.UI;
usingSystem.Web.UI.WebControls;
usingSystem.Data.SqlClient;
publicpartialclassajaxform: System.Web.UI.Page
protectedvoidPage_Load(object sender, EventArgs e)
protectedvoid Button1_Click(object sender, EventArgs e)
SqlConnection con = newSqlConnection(@"Data Source=.\sqlexpress;Initial
Catalog=BreakingNews;Integrated Security=True"); con.Open();
SqlCommand com = newSqlCommand("select * from news",
con); SqlDataReaderdr = com.ExecuteReader();
while (dr.Read())
      Label1.Text +=dr[1].ToString()+"<br/>';
con.Close();
```

OUTPUT:



final exams are starting from 18 november vsit comes under mumbai university

BreakingNews

PRACTICAL NO: 9(B)

<u>AIM</u>: In the above website also display the feedback on the browser as "work is in progress".

DESIGN:



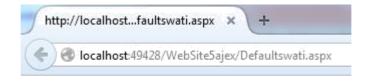
CODE:

```
using System;
usingSystem.Collections.Generic;
usingSystem.Ling;
usingSystem.Web;
usingSystem.Web.UI;
usingSystem.Web.UI.WebControls;
usingSystem.Data.SqlClient;
publicpartialclassajaxform: System. Web. UI. Page
protectedvoidPage_Load(object sender, EventArgs e)
System. Threading. Thread. Sleep (5000);
protectedvoid Button1_Click(object sender, EventArgs e)
SqlConnection con = newSqlConnection(@"Data Source=.\sqlexpress;Initial
Catalog=BreakingNews;Integrated Security=True"); con.Open();
SqlCommand com = newSqlCommand("select * from news",
con); SqlDataReaderdr = com.ExecuteReader();
while (dr.Read())
       Label1.Text +=dr[1].ToString()+"<br/>';
con.Close();
```

Source Code:

```
@PageLanguage="C#"AutoEventWireup="true"CodeFile="ajaxform.aspx.cs"Inherits="aj
axform"%>
<!DOCTYPEhtmlPUBLIC"-//W3C//DTD XHTML 1.0</pre>
Transitional//EN""http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<htmlxmlns="http://www.w3.org/1999/xhtml">
<headrunat="server">
<title></title>
</head>
<body>
<formid="form1"runat="server">
<div>
<asp:ScriptManagerID="ScriptManager1"runat="server">
</asp:ScriptManager>
<br/>
<asp:UpdatePanelID="UpdatePanel1"runat="server">
<ContentTemplate>
<asp:LabelID="Label1"runat="server"></asp:Label>
<br/>br/>
<br/>br/>
<asp:ButtonID="Button1"runat="server"Text="Breaking news"/>
</ContentTemplate>
</asp:UpdatePanel>
<br/>
<br/>br/>
<br/>
<asp:UpdateProgressID="UpdateProgress1"runat="server">
<ProgressTemplate>Work in progress</ProgressTemplate>
</asp:UpdateProgress>
<br/>
<br/>
</div>
</form>
</body>
</html>
```

Output:



BreakingNews
Work in progress



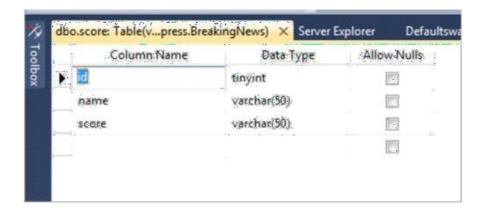
final exams are starting from 18 november vsit comes under mumbai university

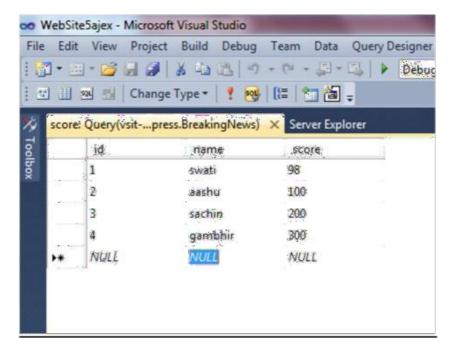
BreakingNews

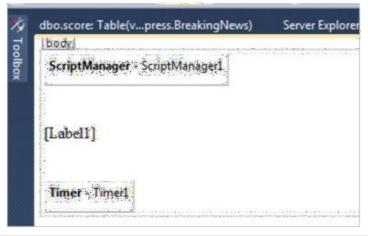
PRACTICAL NO: 9(C)

AIM: Create a web page to display the cricket score from the table event(id, name, score). Refresh the website automatically after every 30 seconds.

DESIGN:







CODE:

```
Default.aspx
using System;
using System.Collections.Generic;
using System.Linq;
using System. Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;
public partial class Defaultswati1: System. Web. UI. Page
  protected void Page_Load(object sender, EventArgs e)
  protected void Timer1_Tick(object sender, EventArgs e)
    SqlConnection conn = new SqlConnection(@"Data Source=.\sqlexpress;Initial
Catalog=BreakingNews;Integrated Security=True");
    SqlDataReader dr = null;
    conn.Open();
    SqlCommand cmd = new SqlCommand("Select * from score", conn);
    dr = cmd.ExecuteReader();
    while (dr.Read())
      Label1.Text += dr[0].ToString() + "" + dr[1].ToString() + "" + dr[2].ToString()
+ "<br>";
    conn.Close();
```

OUTPUT:

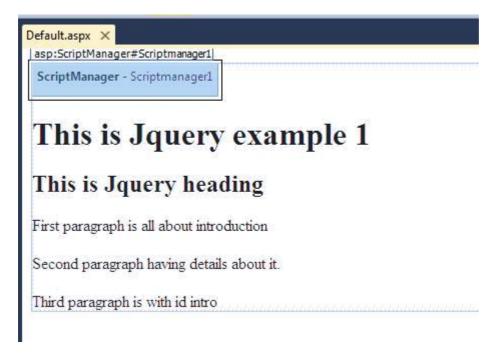


- 1 swati 98
- 2 aashu 100
- 3 sachin 200
- 4 gambhir 300
- 1 swati 98
- 2 aashu 100
- 3 sachin 200
- 4 gambhir 300
- 1 swati 98
- 2 aashu 100
- 3 sachin 200
- 4 gambhir 300

PRACTICAL NO: 10(A)

<u>AIM:</u> Create a web page to give different color effects for paragraph tags, heading tags and complete web page using JQuery.

DESIGN:



Source Code:

```
<%@PageLanguage="C#"AutoEventWireup="true"CodeFile="Default.aspx.cs"Inherits="_D</p>
efault"%>
<!DOCTYPEhtmlPUBLIC"-//W3C//DTD XHTML 1.0</pre>
Transitional//EN""http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<htmlxmlns="http://www.w3.org/1999/xhtml">
<headrunat="server">
<title></title>
</head>
<body>
<formid="form1"runat="server">
<div>
<scripttype="text/javascript">
     $(document).ready(function() {
       $("p").css("color", "Yellow");
       $("h1,h2").css("color", "White");
       $("p#intro").css("color", "Blue");
       $("*").css("background-color", "Red");
    });
```

```
</script>
<asp:ScriptManagerID="Scrpitmanager1"runat="server">
<Scripts>
<asp:ScriptReferencePath="~/scrpits/jquery-1.11.3.js"/>

</scripts>
</asp:ScriptManager>
<h1>This is Jquery example</h1>
<h2>This is Jquery heading</h2>
First paragraph is all about introduction
Second paragraph having details about it
<pid="intro">Third paragraph is with id intro
</div>
</form>
</body>
</html>
```

OUTPUT:



PRACTICAL NO: 10(B)

AIM: Create a web page to display animation using JQuery.

DESIGN:

```
Default2.aspx × Default.aspx
| body |
| ScriptManager - ScriptManager1 |
| First paragraph |
| First heading
```

Source Code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default2.aspx.cs"</p>
Inherits="Default2" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <script type="text/javascript"">
    $(document).ready(function() {
       $('p').hide(1000);
       $('p').show(2000);
       $('p').toggle(3000);
       $('p').slideDown(4000);
       $('p').slideUp(5000);
       $('h1').animate({
         opacity: 0.4, marginLeft: '50px', fontSize: '100px'
       }, 8000);
     });
```

```
</script>
<asp:ScriptManager ID="Scriptmanager1" runat="server">
<Scripts>
<asp:ScriptReference Path="~/Scripts/jquery-1.11.3.js"/>
</Scripts>
</asp:ScriptManager>
First Paragraph
<h1>First Heading</h1>
</div>
</form>
</body>
</html>
```

OUTPUT:





PRACTICAL NO: 10(C)

<u>AIM:</u> Create a web page to display hide, show, slidedown, slideup and Toggle effects for paragraph tags, using JQuery.

DESIGN:



Source Code:

Default.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Default2.aspx.cs"</p>
Inherits="Default2" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"</p>
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title></title>
</head>
<body>
  <form id="form1" runat="server">
  <div>
  <script type="text/javascript">
  $(document).ready(function(){
  $('h1').animate({
  opacity:
  0.4,marginLeft:'50px',fontSize:'100px'},8000); });
  </script>
  <asp:ScriptManager ID="ScriptManager1"
  runat="server"> <Scripts>
  <asp:ScriptReference Path="~/script/jquery-1.11.3.js" /></Scripts></asp:ScriptManager>
  First paragraph
  <h1>First heading heading</h1>
```



First heading heading