

## **Assignment no : 1**

**Write a C# program to print a simple “hello” word.**

```
using System;

namespace hello
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("hello");
            Console.ReadLine();
        }
    }
}
```

### **Output:**

hello

## Assignment No:2

**Write a C# Program To Check Given Number Is Palindrome or Not .**

```
using System;
```

```
namespace PalindromNo
```

```
{
```

```
    public class Program
```

```
    {
```

```
        int no,temp,rem,sum;
```

```
        public void get()
```

```
        {
```

```
            Console.WriteLine("Enter The Number = ");
```

```
            no = Convert.ToInt32(Console.ReadLine());
```

```
        }
```

```
        public void show()
```

```
        {
```

```
            temp = no;
```

```
            while (no > 0)
```

```
            {
```

```
                rem = no % 10;
```

```
                sum = (sum * 10) + rem;
```

```
                no = no / 10;
```

```
            }
```

```
            if (temp == sum)
```

```
            {
```

```
Console.WriteLine("Given Number is Palindrome");
}
else
{
Console.WriteLine("Given Number is Not Palindrome");
} } }
class Program1
{
static void Main(string[] args)
{
Program P = new Program();
P.get();
P.show();
Console.ReadLine();
} } }
```

**Output :**

Enter The Number = 121

Given Number is Palindrome

Enter The Number = 123

Given Number is Not Palindrome

### **Assignment no:3**

#### **Write C# Program to Check Whether the Entered Number is a Perfect Number or Not**

```
using System;

namespace Program
{
    class Program
    {
        static void Main(string[] args)
        {
            int number,sum=0,n;

            Console.Write("enter the Number");

            number = int.Parse(Console.ReadLine());

            n = number;

            for (int i = 1; i < number;i++)
            {
                if (number % i == 0)
                {
                    sum=sum + i;
                }
            }

            if (sum == n)
            {
                Console.WriteLine("\n Entered number is a perfect number");
            }
        }
    }
}
```

```
Console.ReadLine();  
}  
else  
{  
Console.WriteLine("\n Entered number is not a perfect number");  
Console.ReadLine();  
}  
}  
}  
}
```

## Assignment No:4

**Write a C# Program to Check Given Number Armstrong or not.**

using System;

public class Exercise29

{

public static void Main()

{

int num,r,sum=0,temp;

Console.Write("\n\n");

Console.Write("Check whether a given number is armstrong number or not:\n");

Console.Write("-----");

Console.Write("\n\n");

Console.Write("Input a number: ");

num = Convert.ToInt32(Console.ReadLine());

for(temp=num;num!=0;num=num/10){

r=num % 10;

sum=sum+(r\*r\*r);

}

if(sum==temp)

Console.Write("{0} is an Armstrong number.\n",temp);

else

Console.Write("{0} is not an Armstrong number.\n",temp);

}

}

**Output:**

Check whether a given number is armstrong number or not:

Input a number: 153

153 is an Armstrong number.

## Assignment No : 5

### Write a C# Program to Check Given Number is Prime or Not

using System;

namespace ConsoleApplication2

{

class prime

{

int n, i, count = 0;

public void read()

{s

Console.WriteLine("Enter the Number:");

n = Convert.ToInt32(Console.ReadLine());

}

public void display()

{

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

{

if (n % i == 0)

{

count++;

}

}

if (count == 2)

{



```
Console.WriteLine("Prime Number");  
  
}  
  
else  
  
{  
Console.WriteLine("Not Prime Number");  
  
}  
  
}  
  
}  
  
class Program  
  
{  
  
static void Main(string[] args)  
  
{  
  
prime p = new prime();  
p.read();  
p.display();  
  
}  
  
}}
```

**Output:**

Enter the Number : 7

Prime Number

## Assignment no: 6

**Write C# program to print the factorial of the given number.**

using System;

namespace ConsoleApplication6

{

class Program

{

int no,i,fact=1;

public void read()

{

Console.WriteLine("Enter The Number :- ");

no = Convert.ToInt32(Console.ReadLine());

}

public void show()

{

for (i = 1; i <= no; i++)

{

fact = fact \* i;

}

Console.WriteLine("Factorial of {0} is :- {1}",no,fact);

}

}

class Program1

{

```
static void Main(string[] args)
{
    Program P = new Program();
    P.read();
    P.show();
    Console.ReadLine();
}
}
```

Output :-

Enter the number 5

Factorial is 120.

## Assignment No:-7

**Write a c# program to print Addition of three Numbers.**

using System;

namespace ConsoleApplication5

{

public class Program

{

int a, b, c, d;

public void get()

{

Console.WriteLine("Enter 1 number:-");

a=Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter 2 number:-");

b=Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter 3 number:-");

c=Convert.ToInt32(Console.ReadLine());

}

public void show()

{

d = a + b + c;

Console.WriteLine("Addition of 3 number is:-" + d);

}

}

class program1

```
{  
static void Main(string[] args)  
{  
Program j = new Program();  
j.get();  
j.show();  
Console.ReadKey();  
}  
}  
}
```

**Output:-**

Enter 1 Digit:-

3

Enter 2 Digit:-

5

Enter 3 Digit:-

6

Addition of 3 Digit is:-14

## Assignment No:-8

**Write a program to print Addition of three digit.**

using System;

namespace ConsoleApplication5

{

public class Program

{

int a, b, c, d;

public void get()

{

Console.WriteLine("Enter 1 Digit:-");

a=Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter 2 Digit:-");

b=Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter 3 Digit:-");

c=Convert.ToInt32(Console.ReadLine());

}

public void show()

{

d = a + b + c;

Console.WriteLine("Addition of 3 Digit is:-" + d);

}

}

class program1

```
{  
static void Main(string[] args)  
{  
Program j = new Program();  
j.get();  
j.show();  
Console.ReadKey();  
}  
}  
}
```

Output:-

Enter 1 Digit:-

3

Enter 2 Digit:-

5

Enter 3 Digit:-

6

Addition of 3 Digit is:-14

## Assignment No:9

**Write a c# program to print a “Each one”,”Teach one”,Tree one” given no. of time.**

```
using System;

using System.Linq;

namespace Simple
{
    public static class Program
    {
        public static void Main()
        {
            int i,no;

            Console.WriteLine("Enter No:-");

            Convert.ToInt16(Console.ReadLine());

            for(i=0;i<=no;i++)
            {
                Console.WriteLine("Teach One Each One Tree One ");
            }
        }
    }
}
```

Output:

Each One,Teach One, Tree One



## Assignment no:10

**Write a c# program to check given number is positive negative or zero.**

```
using System;

namespace Check_Number
{
    class Program
    {
        Static void Main(String[] args)
        {
            int num;

            Console.WriteLine("Enter the number:");
            num = Convert.ToInt16(Console.ReadLine());

            if (num >= 0)
            {
                if (num == 0)
                {
                    Console.WriteLine("Given number is Zero");
                }
                else
                {
                    Console.WriteLine("Given number is positive");
                }
            }
            else
            {
                Console.WriteLine("Given number is negative");
            }
        }
    }
}
```

```
}  
Console.ReadLine();  
}  
}  
}
```

**Output:-**

Enterthenumber:-5

Givennumberispositive

Enterthenumber:--3

Givennumberisnegative

Enterthenumber:-0

GivennumberisZero

## Assignment no:11

**Write a c# program to print a Square of number.**

```
using System;
namespace square
{
    class Program
    {
        static void Main(string[] args)
        {
            int a,b;
            Console.Write("enter the first number : ");
            a=Convert.ToInt32(Console.ReadLine());
            b = a * a;
            Console.WriteLine("square" + b);
            Console.ReadLine();

        }
    }
}
```

**Output: 5**

**Square is=25**

## Assignment no:12

**Write a C# program show use of different Operator**

### **a)Arithmetic**

```
using System;
namespace arithmeticoperator
{
class Program
{
static void Main(string[] args)
{
int result;
int a = 10, b = 20;
result = (a + b);
Console.WriteLine("addition operator:", result);
result = (a - b);
Console.WriteLine("substraction operator:", result);
result = (a / b);
Console.WriteLine("division operator:", result);
result = (a % b);
Console.WriteLine("module operator:", result);
Console.ReadLine();
}
}
}
```

### **b)Logical**

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

namespace logical1
{
class Program
{
static void Main(string[] args)
{
int a, b, c;
```

```
Console.WriteLine("enter the number a:-");
a = Convert.ToInt32(Console.ReadLine());
Console.WriteLine("enter the number b:-");
b = Convert.ToInt32(Console.ReadLine());
Console.WriteLine("enter the number c:-");
c = Convert.ToInt32(Console.ReadLine());
```

```
Console.WriteLine("a:-" + a);
Console.WriteLine("b:-" + b);
Console.WriteLine("c:-" + c);
```

```
if (a < b && b < c)
{
    Console.WriteLine("a<b && b<c:True");
}
else
{
    Console.WriteLine("false");
}
if (a < b || b > c)
{
    Console.WriteLine(" a<b || b>c:True");
}
else
{
    Console.WriteLine("false");
}
Console.ReadLine();
}
```

```
}
}
```

**c)Relational**  
using System;

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

namespace relationaloperator
{
    class Program
    {
        static void Main(string[] args)
        {
            bool result;
            int a = 10, b = 20;
            result = (a == b);
            Console.WriteLine("equal to operator:" + result);
            result = (a > b);
            Console.WriteLine("greater than operator:" + result);
            result = (a < b);
            Console.WriteLine("lesser than operator:" + result);
            result = (a != b);
            Console.WriteLine("not equal to operator:" + result);
            result = (a == b);
            Console.WriteLine("equal to operator:" + result);
            Console.WriteLine("press enter key to exit..");
            Console.ReadLine();
        }
    }
}
```

## Assignment no:13

**Write a C# program to demonstrate use of looping construct (For,While,DoWhile).**

### 1. For loop

```
using System;

namespace ConsoleApplication6
{
    class Program
    {
        static void Main(string[] args)
        {
            int no,i,table;

            Console.WriteLine("enter the number");
            no = Convert.ToInt32(Console.ReadLine());

            for ( i = 1; i<=10; i++)
            {
                table = no * i;

                Console.WriteLine(table);
            }

            Console.ReadLine();
        }
    }
}
```

### Output:

enter the number

10 10 20 30 40 50 60 70 80 90 100

## **2)While loop**

```
using System;

namespace Loop
{
    class WhileLoop
    {
        public static void Main(string[] args)
        {
            int i=1;
            while (i<=5)
            {
                Console.WriteLine("C# For Loop: Iteration {0}", i);
                i++;
            }
        }
    }
}
```

Output:

C# while Loop: Iteration 1

C# while Loop: Iteration 2

C# while Loop: Iteration 3

C# while Loop: Iteration 4



## C# while Loop: Iteration 5

### 3)Do-while loop

```
using System;

class Program
{
    static void Main(string[] args)
    {
        int count = 0;
        do
        {
            Console.WriteLine("Hello, world!");
            count++;
        } while (count < 5);
    }
}
```

### Output:

Hello, world!

Hello, world!

Hello, world!

Hello, world!

Hello, world!

## **Assignment no:14**

**Write a C# program to demonstrate use of control flow statement**

(if,else if,if else if).

1) Simple IF

```
using System;
```

```
namespace ConsoleApplication17
```

```
{
```

```
class Program
```

```
{
```

```
static void Main(string[] args)
```

```
{
```

```
int no = 2;
```

```
if (no < 5)
```

```
{
```

```
Console.WriteLine("2 is less than 5");
```

```
}
```

```
Console.ReadLine();
```

```
}
```

```
}
```

```
}
```

**Output : 2 is less than 5**

**2) IF-ELSE**

```
using System;
```

```
namespace ConsoleApplication17
```

```

{
class Program
{
static void Main(string[] args)
{
int no = 12;
if (no < 5)
{
Console.WriteLine("12 is less than 5");
}
else
{
Console.WriteLine("12 is greter than 5");
}
Console.ReadLine();
}
}}

```

**Output :** 12 is greter than 5

### **3) IF-ELSE-IF**

```

using System;

namespace ConsoleApplication17
{
class Program
{

```

```
static void Main(string[] args)
{
    int no = 12;
    if (no < 5)
    {
        Console.WriteLine("12 is less than 5");
    }
    else if (no > 5)
    {
        Console.WriteLine("12 is greter than 5");
    }
    else
    {
        Console.WriteLine("12 is equal to 5");
    }
    Console.ReadLine();
}
}
```

Output : 12 is greter than 5

## Assignment no:15

**Write a C# Program to demonstrate use of switch statement to print month of given number.**

```
using System;
namespace switch_ex
{
class Program
{
static void Main(string[] args)
{
int month;
Console.WriteLine("Enter Number to print month :-");
month = Convert.ToInt32(Console.ReadLine());

switch(month){
case 1 : Console.WriteLine("January");
break;
case 2 : Console.WriteLine("February");
break;
case 3 : Console.WriteLine("March");
break;
case 4 : Console.WriteLine("April");
break;
case 5 : Console.WriteLine("May");
break;
case 6 : Console.WriteLine("June");
break;
case 7 : Console.WriteLine("July");
break;
case 8 : Console.WriteLine("August");
break;
case 9 : Console.WriteLine("September");
break;
case 10 : Console.WriteLine("October");
break;
case 11 : Console.WriteLine("November");
break;
case 12 : Console.WriteLine("December");
break;
default : Console.WriteLine("Enter Valid Number");
break;
}
```

```
}  
Console.ReadLine ();  
}  
}  
}
```

**Output :**

Enter Number to print month :- 5

May

## Assignment No. 16

**Write C# .NET Program to Demonstrate Use Of Class & Object.**

```
using System;
```

```
class demo
```

```
{
```

```
public void read()
```

```
{
```

```
Console.Write("Read function call ");
```

```
}
```

```
}
```

```
class demo1:demo
```

```
{
```

```
public void show()
```

```
{
```

```
Console.WriteLine("Show function call");
```

```
}
```

```
}
```

```
public class HelloWorld
```

```
{
```

```
public static void Main(string[] args)
```

```
{
```

```
demo1 d=new demo1();
```

```
d.read();
```

```
d.show();
```

```
Console.ReadLine();
```

```
}
```

```
}
```

---

OUTPUT:-

Read function call

Show function call



## Assignment no:17

**Write a C# program to demonstrate use of single inheritance**

```
using System;
namespace singleinheritance
{
    public class A
    {
        public void read()
        {
            Console.WriteLine("Base Class...");
        }
    }
    public class B : A
    {
        public void show()
        {
            Console.WriteLine("Drived Class...");
        }
    }
    class Single_inheritance
    {
        public static void Main(string[] args)
        {
            B b1 = new B();
            b1.read();
            b1.show();
            Console.ReadLine();
        }
    }
}
```

Output:

Base Class...

Drived Class..

### **Assignment No:18**

**Write a C# program to demonstrate use of Multilevel inheritance**

using System;

class demo

{

public int a,b;

public void read()

{

Console.WriteLine("Enter the First Number");

a=Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Enter the Second Number");

b=Convert.ToInt32(Console.ReadLine());

}

}

class demo1 : demo

{

public int c;

public void display()

{

c=a+b;

Console.WriteLine ("Addintion is :->" +c);

}

}

class demo2: demo1

{

public int d;

public void display1()

{

d=a\*b;

Console.WriteLine ("multiplication is :->" +d);

}

}

class multilevel

{

static void Main(String[] args)

{

demo1 d1 = new demo1();

d1.read();

d1.display();

demo2 d2=new demo2();

d2.read();

d2.display1();

Console.ReadLine();

```
}  
}
```

**Output:**

Enter the First Number 5  
Enter the Second Number 5  
Addintion is :->10

Enter the First Number 7  
Enter the Second Number 2  
multiplication is :->14

### **Assignment no: 19**

**Write a C# program to demonstrate use of multiple inheritance using interface .**

```
using System;
```

```
interface demo
```

```
{
```

```
public void show();
```

```
}
```

```
class demo1
```

```
{
```

```
public int a,b,c;
```

```
public void read()
```

```
{
```

```
a=5;b=10;
```

```
}
```

```
}
```

```
class demo2:demo1,demo
```

```
{
```

```
public void show()
```

```
{
```

```
c=a+b;
```

```
Console.WriteLine("Addition
```

```
is:-"+c);
```

```
}
```

```
}
```

```
public class Program
{
    public static void Main(string[]
args)
    {
        demo2 d=new demo2();
        d.read();
        d.show();
        Console.ReadLine();
    }
}
```

**Output:**

**Addition is :- 15**

### **Assignment no 20:**

**Write a C# program to using Hierarchical Inheritance.**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
namespace Inheritance {
class Test {
static void Main(string[] args) {
Father f = new Father();
f.display();
Son s = new Son();
s.display();
s.displayOne();
Daughter d = new Daughter();
d.displayTwo();
Console.ReadKey();
}
class Father {
public void display() {
Console.WriteLine("Display...");
}
}
class Son : Father {
```

```
public void displayOne() {  
    Console.WriteLine("Display One");  
}  
  
}  
  
class Daughter : Father {  
    public void displayTwo() {  
        Console.WriteLine("Display Two");  
    }  
}  
}
```

## Assignment no:21

**Write a c# program to demonstrate the use of method overloading.**

```
using System;
public class Calculator
{
    public int Add(int a, int b)
    {
        return a + b;
    }

    public double Add(double a, double b)
    {
        return a + b;
    }

    public int Add(int a, int b, int c)
    {
        return a + b + c;
    }
}

public class Program
{
    public static void Main(string[] args)
    {
        Calculator calculator = new Calculator();

        int result1 = calculator.Add(1, 2);
        double result2 = calculator.Add(1.5, 2.5);
        int result3 = calculator.Add(1, 2, 3);

        Console.WriteLine("Result of adding 1 and 2 = " + result1);
        Console.WriteLine("Result of adding 1.5 and 2.5 = " + result2);
        Console.WriteLine("Result of adding 1, 2, and 3 = " + result3);
    }
}
```



}

Output:

Result of adding 1 and 2 = 3

Result of adding 1.5 and 2.5 = 4

Result of adding 1, 2, and 3 = 6

## Assignment 22

**write a c# program to demonstrate use of method overriding.**

using System;

namespace method\_Overriding

{

class parent

{

public virtual void print()

{

Console.WriteLine("This a method of parent class");

}

}

class child : parent

{

public override void print()

{

console.WriteLine("This a method of child class");

}

}

class program

{

static void Main(String [] args)

{

parent p = new child()

```
p.print();  
Console.ReadLine();  
}  
}  
}
```

Output :- This a method of child class

## Assignment 23

**Write a c# program to demonstrate use of exception handling (divide by 0).**

```
using System;
```

```
class Program
```

```
{
```

```
    static void Main()
```

```
    {
```

```
        int numerator, denominator, result;
```

```
        Console.Write("Enter the numerator: ");
```

```
        numerator = Convert.ToInt32(Console.ReadLine());
```

```
        Console.Write("Enter the denominator: ");
```

```
        denominator = Convert.ToInt32(Console.ReadLine());
```

```
        try
```

```
        {
```

```
            result = numerator / denominator;
```

```
            Console.WriteLine("Result: {0}", result);
```

```
        }
```

```
        catch (DivideByZeroException ex)
```

```
        {
```

```
            Console.WriteLine("Error: {0}", ex.Message);
```

```
        }
```

```
        Console.WriteLine("Press any key to exit...");  
        Console.ReadKey();  
    }  
}
```

### Output

Enter the numerator: 5

Enter the denominator: 0

Error: Attempted to divide by zero.

## Assignment no :- 24

**Write a C# program to demonstrate use of constructor (Default , parameterized). Default Constructor :**

```
using System;

class demo
{
    public demo()
    {
        Console.WriteLine("Default Construter Called:");
    }
}

class constru
{
    public static void Main(String [] args)
    {
        demo a1 = new demo();
        Console. ReadLine();
    }
}
```

Output :

Default Construter Called:

Parameterized Constructor :

```
using System;

class demo
```

```
{  
public demo(int a, int b)  
{  
Console.WriteLine("Parameterized Constructer called:" + " " + (a+b) );  
}  
}  
class constru  
{  
public static void Main(String [] args)  
{  
demo a1 = new demo(10,10);  
Console. ReadLine();  
}  
}
```

Output :

Parameterized Constructer called: 20

## **ASSIGNMENT NO: 25**

**Write a c# program To Demonstrate use of Copy Constructor**

using System;

namespace copyconstruct1

{

class Program

{

int a,b;

Program()

{

a = 10;

b = 20;

}

Program(Program c)

{

a = c.a;

b = c.b;

Console.WriteLine(a + b);

}

static void Main(string[] args)

{

Program obj = new Program();



```
Program obj1 = new Program(obj);
```

```
Console.ReadLine();
```

```
}
```

```
}
```

```
}
```

Output : 30.

## Assignment No:-26

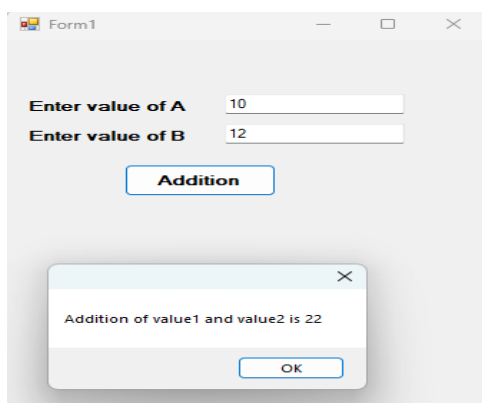
**Write C# Window Application using label, textbox and button control.**

```
using System;
using System.Windows.Forms;
using System.Data.OleDb;

namespace WindowsFormsApplication39
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();

            private void button1_Click(object sender, EventArgs e)
            {
                int number1 = Convert.ToInt32(textBox1.Text);
                int number2 = Convert.ToInt32(textBox2.Text);
                int add = number1 + number2;
                MessageBox.Show("Addition of value1 and value2 is " +
add.ToString());

            }
        }
    }
}
```



## **Assinment No 27**

### **Write a C# Window Application for Addition of Two Number**

using System;

using System.Windows.Forms;

namespace AdditionOfTwoNumber

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

private void button1\_Click(object sender, EventArgs e)

{

int number1 = Convert.ToInt32(textBox1.Text);

int number2 = Convert.ToInt32(textBox2.Text);

int result = number1 + number2;

MessageBox.Show("Addition is" + result.ToString());

}

}

}

Output:

Form1

Enter value of A

Enter value of B

**Addition**

Addition of value1 and value2 is 22

OK

**Assignment no:28**  
**Write C# Application using Login form.**

```
using System;
using System.Windows.Forms;

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

            private void button1_Click(object sender, EventArgs e)
            {
                if (textBox1.Text == "admin" && textBox2.Text == "1234")
                {
                    MessageBox.Show("login Successfully");

                }

                else
                {
                    MessageBox.Show("login is incorrect");
                }
            }

            private void label2_Click(object sender, EventArgs e)
            {
            }

        }
    }
}
```

Output:

Form1

— □ ×

USERNAME

PASSWORD

LOGIN

×

login Successfully

OK

Form1

— □ ×

USERNAME

PASSWORD

LOGIN

×

Username or Password is incorrect

OK

**Assignment no:29.**

**Write C# Application Using ListBox , ComboBox Controls.**

```
using System;
using System.Windows.Forms;
using System.Data.OleDb;

namespace yash12
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();

            private void flowLayoutPanel1_Paint(object sender, PaintEventArgs e)
            {

            }

            private void button1_Click(object sender, EventArgs e)
            {
                foreach (object obj in listBox1.SelectedItems)
                {
                    MessageBox.Show("You are selected " + obj.ToString());
                }
            }

            private void button2_Click(object sender, EventArgs e)
            {
                string var;
                var = comboBox1.Text;
                MessageBox.Show("You are Selected " + var);
            }
        }
    }
}
```

Select\_Day

Sunday  
Monday  
Tuesday  
Wednesday  
Thursday  
Friday  
Saturday

Day

You are selected Wednesday

OK

Form1

Select\_Month

February

Month

You are Selected February

OK



### **Assignment NO 30:-**

**Write C# Windows application using Picture Box and ScrollBar controls.**

```
Using System;
Using System.Windows.Forms;
Namespace WindowsFormsApplication7
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }
        Private void hScrollBar1_Scroll(object sender , ScrollEventArgs e)
        {
            label1.Text="use of scrollbar in windows form";
            label2.Text=hScrollBar1.Value.ToString();
            hScrollBar1.Maximum=0;
            hScrollBar1.Maximum=100;
            hScrollBar1.Value=0;
            hScrollBar1.BackColor=Color.Blue;
        }
        Private void hScrollBar1_MouseHover(object sender , EventArgs e)
        {
            label1.ForeColor=Color.Green;
        }
        Private void vScrollBar1_Scroll(object sender , ScrollEventArgs e)
        {
            label2.Text="use of scrollbar in vertical form";
            label1.Text=vScrollBar1.Value.ToString();
            vScrollBar1.Minimum=0;
            vScrollBar1.Maximum=100;
            vScrollBar1.Value=0;
            vScrollBar1.BackColor=Color.Yellow;
        }
        Private void vScrollBar1_MouseHover(object sender , EventArgs e)
        {
            label2.ForeColor=Color.Red;
        }
    }
}
```

Picture Box Inserted Steps:-

Step1): Create a Form.

Step2): Insert picture Box.

Step3): Write Code for hScrollbar.

## **Assignment : 31**

### **Demonstrate use of timer control in C#.**

using System;

```
{  
  
    public static void Main()  
  
    {  
  
        Timer newTimer = new Timer();  
        newTimer.Elapsed += new ElapsedEventHandler(DisplayTimeEvent);  
        newTimer.Interval = 2000;  
        newTimer.Start();  
        while (Console.Read() != 'q')  
        {  
  
            ; } }  
  
        public static void DisplayTimeEvent(object source, ElapsedEventArgs e)  
        {  
  
            Console.WriteLine("\r{0} ", DateTime.Now);  
  
        }  
    }
```

Output :-

1 3-03-2023 21:36:37

## **Assignment No:32**

### **a)Insert Button Code:**

```
private void button1_Click(object sender, EventArgs e)
{
    OleDbConnection con = new
    OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
    Source=E:\\DarshanDB.accdb");

    con.Open();

    OleDbCommand cmd = new OleDbCommand("insert into
    Stud(roll,name,division) values("+textBox1.Text + ","
    +textBox2.Text + ","+comboBox1.SelectedItem.ToString()+")",con);

    cmd.ExecuteNonQuery();

    MessageBox.Show("Data Stored Succesfully...");

    con.Close();
}
```

### **b)Update Button Code:**

```
private void button2_Click(object sender, EventArgs e)
{
    try
    {
        OleDbConnection con = new
        OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
        Source=E:\\DarshanDB.accdb");

        OleDbCommand cmd = new OleDbCommand("update Stud set name=" +
        textBox2.Text + ", division=" +
        comboBox1.SelectedItem.ToString() + " where roll=" + textBox1.Text + " ",
        con);
```

```

con.Open();

cmd.ExecuteNonQuery();

MessageBox.Show("Data Updated Succesfully...");

con.Close();

}

catch (Exception ex)

{

label5.Text = ex.ToString();

}

}

```

### c)Display Button Code:

```

private void button3_Click(object sender, EventArgs e)

{

OleDbConnection con = new
OleDbConnection("Provider=Microsoft.ACE.OLEDB.12.0;Data
Source=E:\\DarshanDB.accdb");

OleDbDataAdapter da = new OleDbDataAdapter("select * from Stud",con);

con.Open();

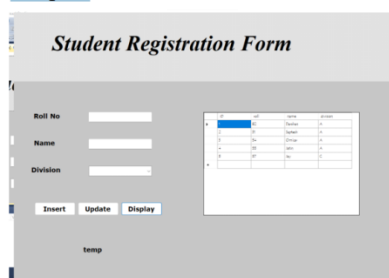
DataSet ds = new DataSet();

da.Fill(ds,"Stud");

dataGridView1.DataSource = ds.Tables["Stud"].DefaultView;}

```

#### Output:



### **Assignment No:33**

**Write a c# program demonstrate simple database connectivity using wizard.**

**Step 1 :** Create windows form

**Step 2:** open the Microsoft access.

**Step 3:** create database.

**Step 4:** right click on table and select design view and change table name.

**Step 5:** insert field and save and close.

**Step 6:** reopen Microsoft visual studio 2010.

**Step 7:** click on server explorer.

**Step 8:** select the database connection.

**Step 9:** click on browser and select the path.

