

Name :- Rohan Babulnath Kamble

Class :- S. Y. B. Sc. CS

PRN NO :- 2020420004

Subject Code :- USCS406

Practical No. 1

Aim:- Write C# programs for understanding C# basics involving:- a) Variables and Data Types b) Object-Based Manipulation c) Conditional Logic d) Loops e) Methods.

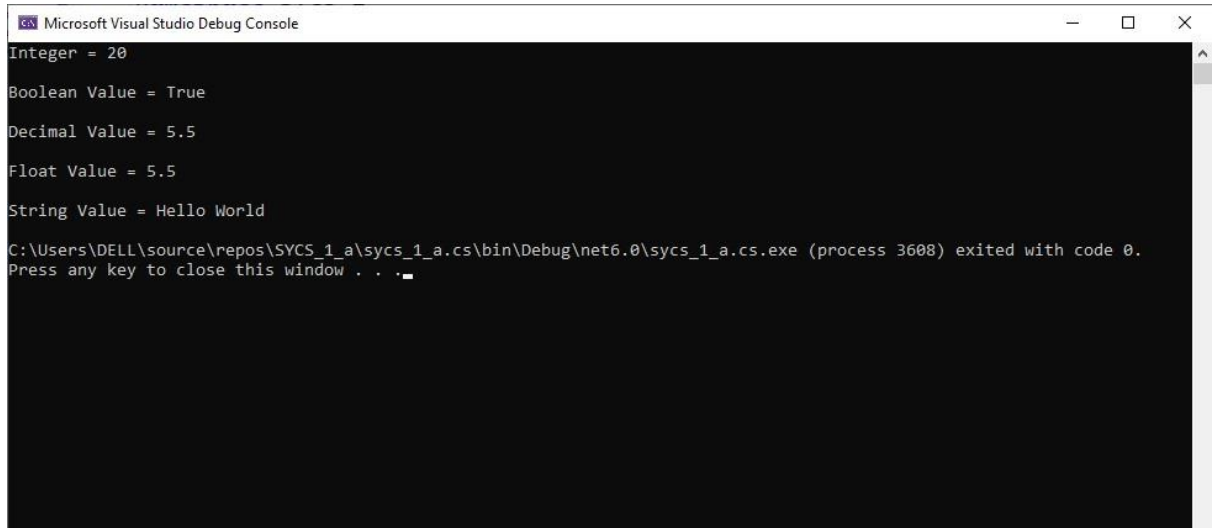
a) Variables and Data Types

Program :-

```
using System;
namespace sycs_1_a
{
    class sycs_1_a
    {
        static void Main(string[] args)
        {
            int a = 20;
            bool b = true;
            double c = 5.5D;
            float d = 5.5F;
            string val = "Hello World";
            Console.WriteLine("Integer = " + a);
            Console.WriteLine("Boolean Value = " + b);
            Console.WriteLine("Decimal Value = " + c);
            Console.WriteLine("Float Value = " + d);
            Console.WriteLine("String Value = " + val);
        }
    }
}
```

```
}
```

Output:-

A screenshot of the Microsoft Visual Studio Debug Console window. The window has a title bar with the text "Microsoft Visual Studio Debug Console" and standard window controls (minimize, maximize, close). The console output is as follows:

```
Integer = 20
Boolean Value = True
Decimal Value = 5.5
Float Value = 5.5
String Value = Hello World
C:\Users\DELL\source\repos\SYCS_1_a\syics_1_a.cs\bin\Debug\net6.0\syics_1_a.cs.exe (process 3608) exited with code 0.
Press any key to close this window . . .
```

b) Object-Based Manipulation

Program:-

```
using System;
namespace syics_1_b
{
    class syics_1_b
    {
        static void Main(string[] args)
        {
            string mystring;
            int a = 100;
            Console.WriteLine("Convert Number to String");
            mystring = a.ToString();
            Console.WriteLine("String is " + mystring);
        }
    }
}
```

```

Console.WriteLine(mystring.GetType());

string s = "This is test string";

s = s.Substring(0, 4);
Console.WriteLine("\nSubstring() Method: " + s);

s = s.ToUpper();
Console.WriteLine("\nUppercase String: " + s);

s = s.Replace("IS", "AT");
Console.WriteLine("\nReplace String: " + s);

int length = s.Length;
Console.WriteLine("\nLength of String is: " + length);

Console.WriteLine("\n*****");

Console.WriteLine("\n\nDateTime Object");
DateTime myDate = DateTime.Now;
Console.WriteLine(myDate);

myDate = myDate.AddDays(100);
Console.WriteLine("\nAfter 100 Days the Date is: " + myDate);
string dateString = myDate.Year.ToString();
Console.WriteLine("\nYear in String is: " + dateString);

DateTime myDate1 = DateTime.Now;
DateTime myDate2 = DateTime.Now.AddHours(3000);
Console.WriteLine("\nDate 1 : " + myDate1);
Console.WriteLine("\nDate 2 : " + myDate2);

TimeSpan difference;
difference = myDate2.Subtract(myDate1);
Console.WriteLine("\nDifference between 2 Dates: " + difference);

double numberOfMinutes;
numberOfMinutes = difference.TotalMinutes;
Console.WriteLine("\nNumber of Minutes: " + numberOfMinutes);

```

```

        Console.WriteLine("\n*****");

        Console.WriteLine("\nThe Array Type:");
int[] myArray = { 1, 2, 3, 4, 5, 6, 7, 8, 9 };          int
numberOfElemnts;

        numberOfElemnts = myArray.Length;
        Console.WriteLine("\nTotal Elements in array:" + numberOfElemnts);
    }
}
}

```

Output :-

```

Microsoft Visual Studio Debug Console
Convert Number to String
String is 100

Trim() Method:This is test string
Substring() Method: This
Uppercase String: THIS
Replace String: THAT
Length of String is: 4
*****

DateTime Object
07-04-2022 20:05:16
After 100 Days the Date is: 16-07-2022 20:05:16
Year in String is: 2022
Date 1 : 07-04-2022 20:05:16
Date 2 : 10-08-2022 20:05:16
Difference between 2 Dates: 125.00:00:00.0000053
Number of Minutes: 180000.0000008833
*****

The Array Type:
Total Elements in array:5

C:\Users\DELL\source\repos\SYCS_1_b\SYCS_1_b\bin\Debug\net6.0\SYCS_1_b.exe (process 11684) exited with code 0.
Press any key to close this window . . .

```

c) Conditional Logic

1) If...Else Condition:-

Program:-

```

using System;
namespace SYCS_1_c_a
{
    class SYCS_1_c_a
    {
        static void Main(string[] args)
        {
            char ch;

```

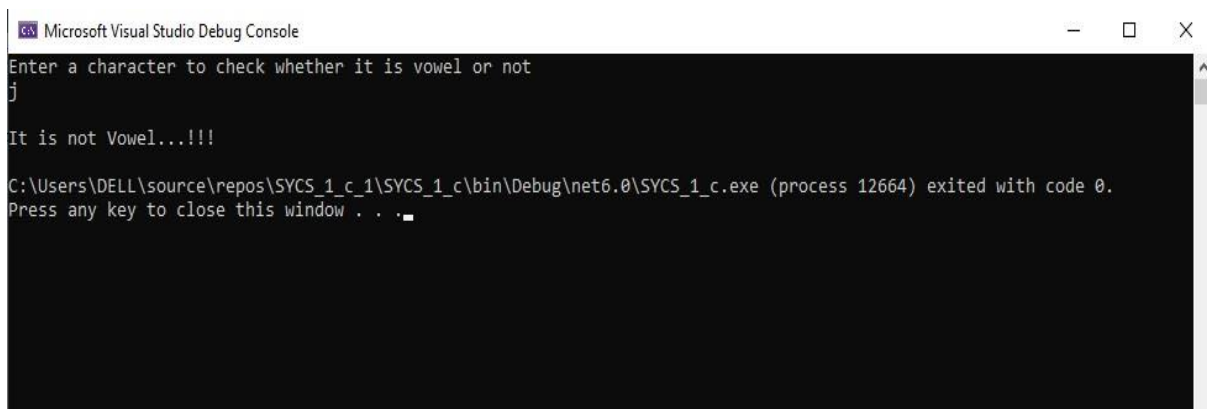
```

        Console.WriteLine("Enter a character to check whether it is vowel or
not");
        ch = Convert.ToChar(Console.ReadLine());

        if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u')
        {
            Console.WriteLine("\nIt is Vowel...!!!");
        }
        else
        {
            Console.WriteLine("\nIt is not Vowel...!!!");
        }
    }
}

```

Output:-



The screenshot shows a Windows console window titled "Microsoft Visual Studio Debug Console". The output of the program is as follows:

```

Enter a character to check whether it is vowel or not
j

It is not Vowel...!!!

C:\Users\DELL\source\repos\SYCS_1_c_1\SYCS_1_c\bin\Debug\net6.0\SYCS_1_c.exe (process 12664) exited with code 0.
Press any key to close this window . . .

```

2) Switch Case:-

Program:-

```

using System;
namespace SYCS_1_c_2
{
    class SYCS_1_c_2
    {
        static void Main(string[] args)
        {
            char op;

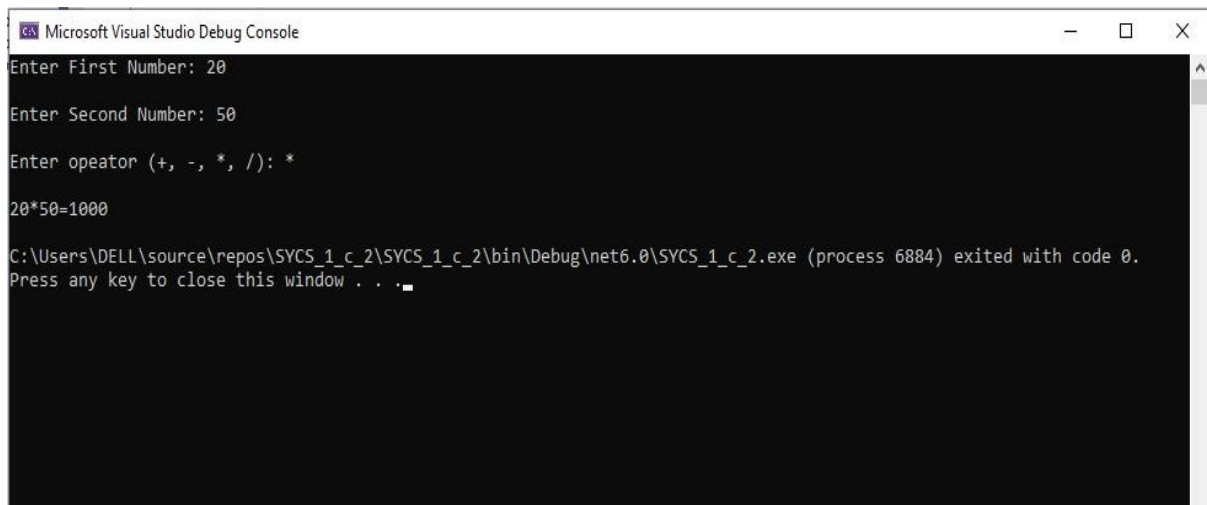
```

```
int first, second, result;
```

```
    Console.Write("Enter First Number: ");  
    first = Convert.ToInt32(Console.ReadLine());  
    Console.Write("\nEnter Second Number: ");  
    second = Convert.ToInt32(Console.ReadLine());  
    Console.Write("\nEnter operator (+, -, *, /): ");  
    op = (char)Console.Read();
```

```
        switch (op)  
        {  
            case  
'+':  
                result = first + second;  
                Console.WriteLine("\n" + first + "+" + second + "=" + result);  
break;  
            case '-'  
':  
                result = first - second;  
                Console.WriteLine("\n" + first + "-" + second + "=" + result);  
break;  
            case  
'*':  
                result = first * second;  
                Console.WriteLine("\n" + first + "*" + second + "=" + result);  
break;  
            case  
'/':  
                result = first / second;  
                Console.WriteLine("\n" + first + "/" + second + "=" + result);  
break;  
            default:  
                Console.WriteLine("\nInvalid Operator");  
break;  
        }  
    }  
}
```

Output:-



A screenshot of the Microsoft Visual Studio Debug Console window. The window has a title bar with the Visual Studio logo and the text 'Microsoft Visual Studio Debug Console'. The console output is as follows:

```
Enter First Number: 20
Enter Second Number: 50
Enter opeator (+, -, *, /): *
20*50=1000
C:\Users\DELL\source\repos\SYCS_1_c_2\SYCS_1_c_2\bin\Debug\net6.0\SYCS_1_c_2.exe (process 6884) exited with code 0.
Press any key to close this window . . .
```

d) Loops

1) For Loop:-

Program:-

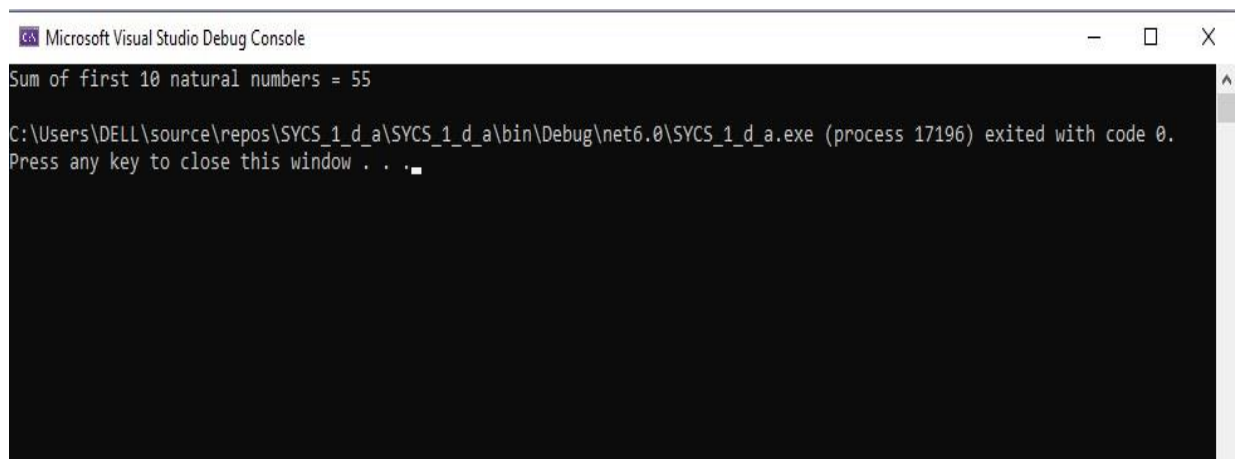
```
using System; namespace
syics_1_d_1
```

```

{
    class sycs_1_d_1
    {
        public static void Main(string[] args)
        {
            int n = 10, sum = 0;
            for (int i = 1; i <= n; i++)
            {
                sum = sum + i;
            }
            Console.WriteLine("Sum of first {0} natural numbers = {1}", n, sum);
        }
    }
}

```

Output:-



The screenshot shows the Microsoft Visual Studio Debug Console window. The title bar reads "Microsoft Visual Studio Debug Console". The console output displays the result of the program execution: "Sum of first 10 natural numbers = 55". Below this, a status message indicates the program has exited successfully: "C:\Users\DELL\source\repos\SYCS_1_d_a\SYCS_1_d_a\bin\Debug\net6.0\SYCS_1_d_a.exe (process 17196) exited with code 0. Press any key to close this window . . .".

2) While Loop:-

Program:-

```

using System;
namespace sycs_1_d_2
{
    class sycs_1_d_2
    {

```



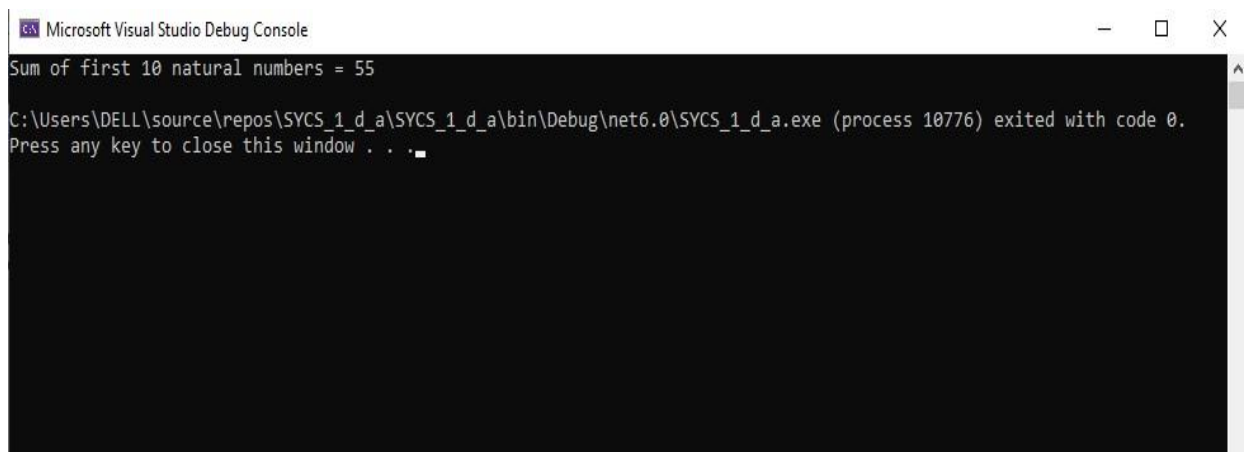
```

    public static void Main(string[] args)
    {
        int n = 10, sum = 0, i = 1;
while (i <= n)
    {
        sum = sum + i;
        i++;
    }
        Console.WriteLine("Sum of first {0} natural numbers = {1}", n, sum);
    }

}
}

```

Output:-



The screenshot shows the Microsoft Visual Studio Debug Console window. The output text is: "Sum of first 10 natural numbers = 55". Below this, a message indicates the program has exited: "C:\Users\DELL\source\repos\SYCS_1_d_a\SYCS_1_d_a\bin\Debug\net6.0\SYCS_1_d_a.exe (process 10776) exited with code 0. Press any key to close this window . . .".

3) Foreach Loop:-

Program:-

```

using System; namespace
sycs_1_d_3
{
    class sycs_1_d_3
    {

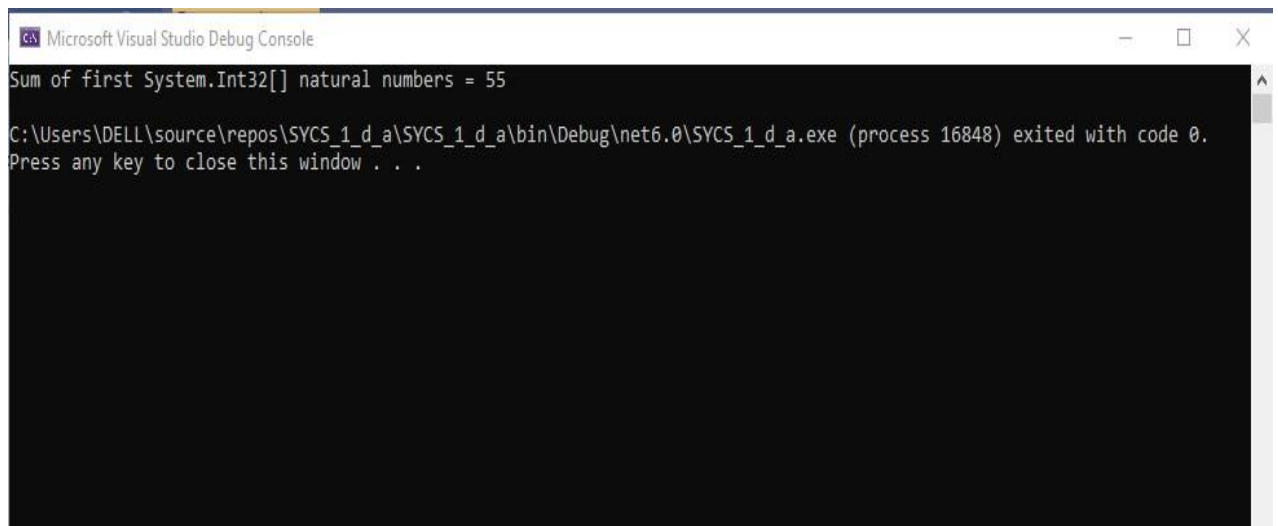
```

```

public static void Main(string[] args)
{
    int sum = 0;
    int[] n = { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 };
    foreach (int number in n)
    {
        sum = sum + number;
    }
    Console.WriteLine("Sum of first {0} natural numbers = {1}", n, sum);
}
}

```

Output:-



e) Methods

Method Overloading:-

Program:-

```

using System; namespace
SYCS_1_e
{

```

```
class SYCS_1_e
{

    // method with int parameter
    void display(int a)
    {
        Console.WriteLine("int type: " + a);
    }
    // method with string parameter
    void display(string b)
    {
        Console.WriteLine("string type: " + b);
    }
    static void Main(String[] args)
    {
        SYCS_1_e s1 = new SYCS_1_e();
s1.display(100);          s1.display("SYCS
Class");
        Console.ReadLine();
    }
}
```

Output:-

A screenshot of a Windows console application window. The title bar shows the file path: "Select C:\Users\DELL\source\repos\SYCS_1_e.cs\SYCS_1_e.cs\bin\Debug\net6.0\SYCS_1_e.cs.exe". The console output displays two lines: "int type: 100" and "string type: SYCS Class". The cursor is positioned at the end of the second line. The window has standard minimize, maximize, and close buttons in the top right corner.

```
Select C:\Users\DELL\source\repos\SYCS_1_e.cs\SYCS_1_e.cs\bin\Debug\net6.0\SYCS_1_e.cs.exe
int type: 100
string type: SYCS Class
```

Practical No. 2

Aim:- Write C# programs for Object oriented concepts of C# such as:- a) Program using classes b) Constructor and Function Overloading c) Inheritance d) Namespaces

a) Program using Classes:-

Program:-

```
using System;
namespace sycs_2_a
{
    class Employee
    {
        public string name;
        public void work(string work)
        {
            Console.WriteLine("Work: " + work);
        }
    }

    class EmployeeDrive
    {
        static void Main(string[] args)
        {
```

```
// create Employee object
Employee e1 = new Employee();

Console.WriteLine("Employee 1");

// set name of the Employee
e1.name = "Gloria";
Console.WriteLine("\nName: " + e1.name);

// call method of the Employee
e1.work("Coding");      Console.ReadLine();
    }
}
}
```

Output:-



```
C:\Users\DELL\source\repos\SYCS_2_a\SYCS_2_a\bin\Debug\net6.0\SYCS_2_a.exe
Employee 1
Name: Gloria
Work: Coding
_
```

b) Constructor and Function Overloading

1) Constructor Overloading:-

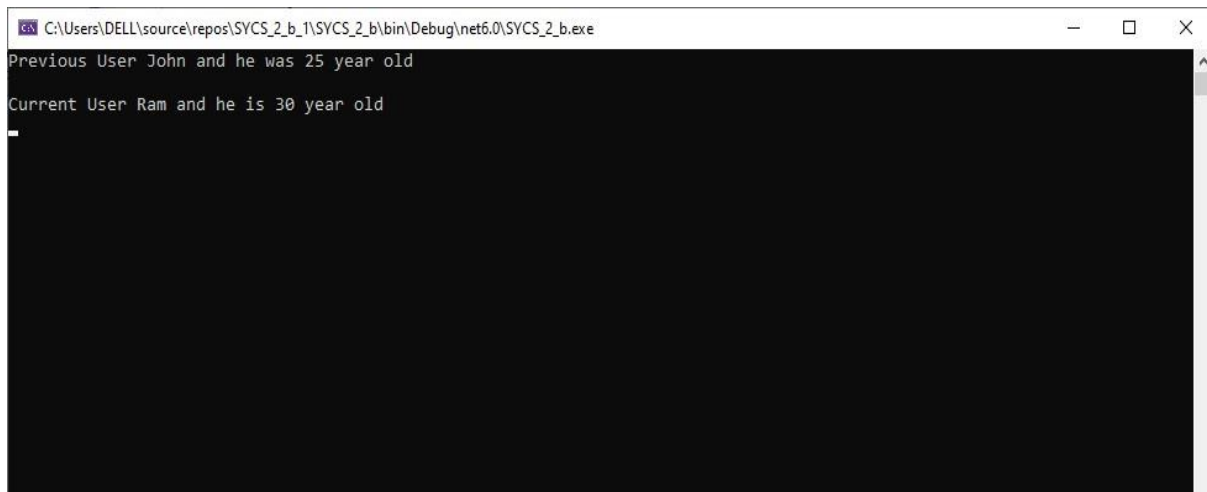
Program:-

```
using System;
namespace sycs_2_b
{
    class gamescore
    {
        string
user;
        int age;
        //Default Constructor
        public gamescore()
        {
            user = "John";
age = 25;
            Console.WriteLine("Previous User {0} and he was {1} year old", user,
age);
        }
        //Parameterized Constructor
        public gamescore(string name,int age1)
        {
            user = name;
age = age1;
            Console.WriteLine("\nCurrent User {0} and he is {1} year old", user,
age);
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
```

```
//Default Constructor Called
gamescore gs = new gamescore();

//Overloaded Constructor
gamescore gs1 = new gamescore("Ram", 30);
Console.ReadLine();
    }
}
}
```

Output:-



```
C:\Users\DELL\source\repos\SYCS_2_b_1\SYCS_2_b\bin\Debug\net6.0\SYCS_2_b.exe
Previous User John and he was 25 year old
Current User Ram and he is 30 year old
_
```

2. Function Overloading:-

Program:-

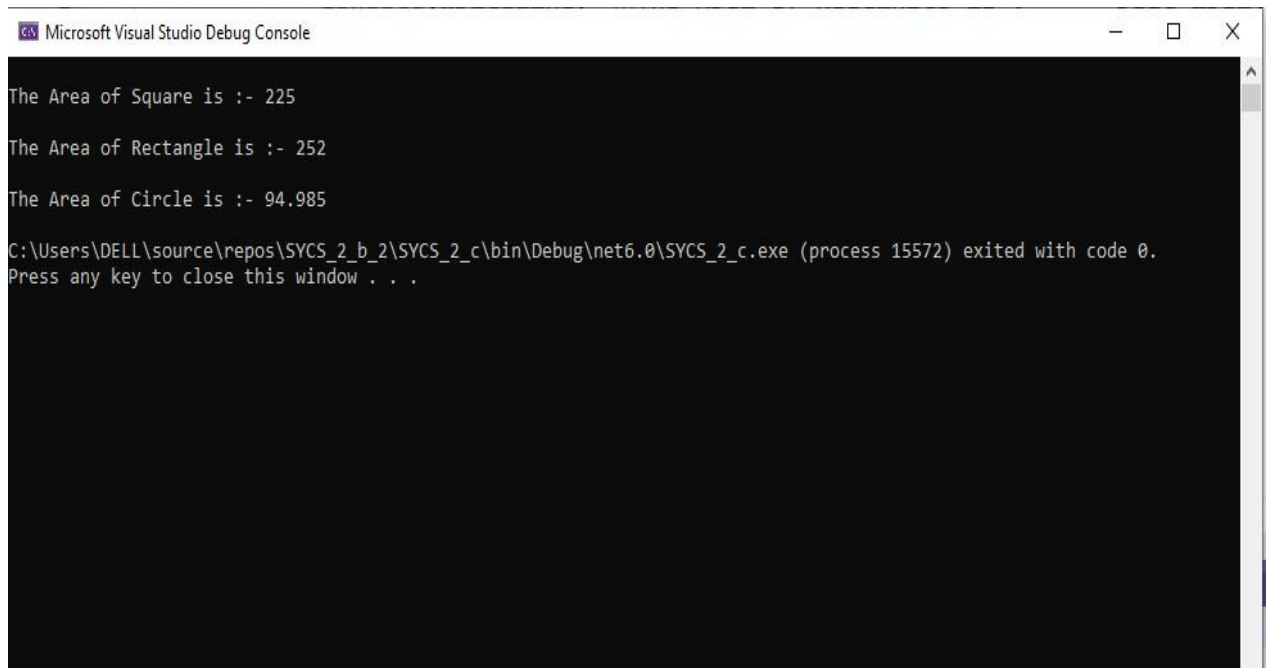
```
using System; namespace
SYCS_1_b
{
    class shape
    {

        public void Area(int side)
        {
            int square_area = side * side;
            Console.WriteLine("\nThe Area of Square is :- " + square_area);
        }
        public void Area(int length, int breadth)
        {
            int rect_area = length * breadth;
            Console.WriteLine("\nThe Area of Rectangle is :- " + rect_area);
        }
        public void Area(double radius)
        {
            double circle_area = 3.14 * radius * radius;
            Console.WriteLine("\nThe Area of Circle is :- " + circle_area);
        }
    }
    class SYCS_1_b
    {
        static void Main(string[] args)
        {
            shape s = new shape();
            s.Area(15);
            s.Area(14, 18);
            s.Area(5.5);
            Console.ReadKey();
        }
    }
}
```



```
}  
}  
}
```

Output:-



The screenshot shows the Microsoft Visual Studio Debug Console window. The title bar reads "Microsoft Visual Studio Debug Console". The console output is as follows:

```
The Area of Square is :- 225  
The Area of Rectangle is :- 252  
The Area of Circle is :- 94.985  
C:\Users\DELL\source\repos\SYCS_2_b_2\SYCS_2_c\bin\Debug\net6.0\SYCS_2_c.exe (process 15572) exited with code 0.  
Press any key to close this window . . .
```

c) Inheritance:-

Program:-

```
using System;
namespace SYCS_2_d
{
    class SYCS_2_d
    {
        static void Main(string[] args)
        {
            Scooter sc = new Scooter();
            sc.ScooterType();

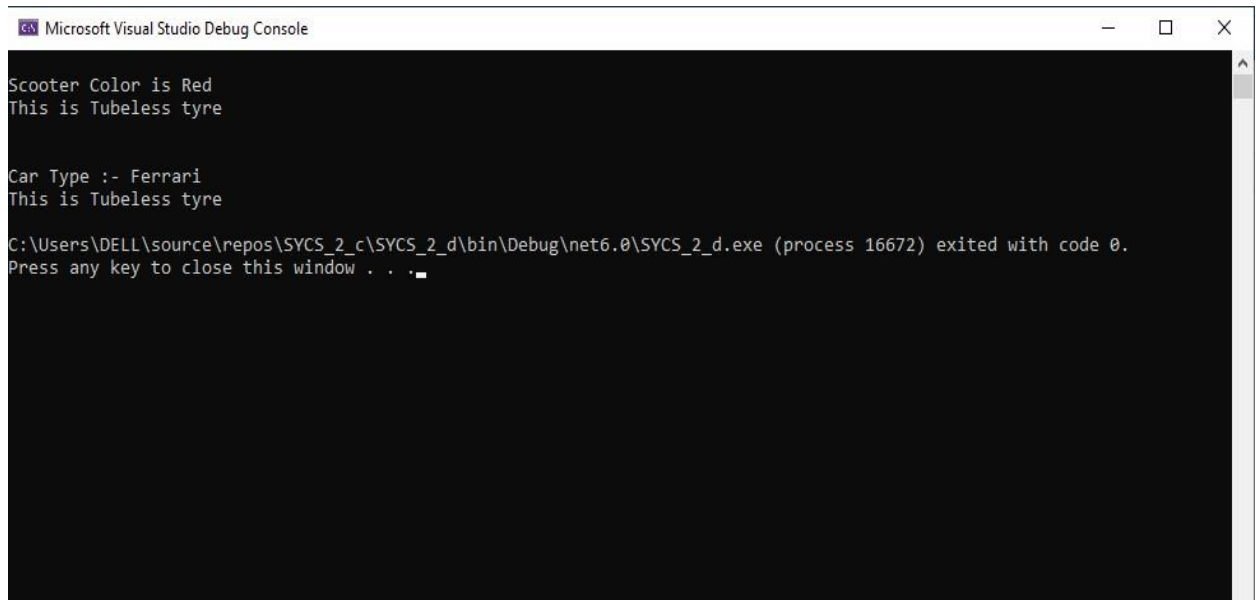
            Car c = new Car();
            c.CarType();

            Console.ReadKey();
        }
    }
    //Creating Base Class
    class Tyre
    {
        protected void TyreType()
        {
            Console.WriteLine("This is Tubeless tyre");
        }
    }
    //Creating Child Class
    class Scooter : Tyre
    {
        public void ScooterType()
        {
            Console.WriteLine("\nScooter Color is Red");
            TyreType();
        }
    }
}
```

```
//Creating Child Class
class Car : Tyre
{

    public void CarType()
    {
        Console.WriteLine("\n\nCar Type :- Ferrari");
        TyreType();
    }
}
}
```

Output:-

A screenshot of the Microsoft Visual Studio Debug Console window. The window has a title bar with the text "Microsoft Visual Studio Debug Console" and standard Windows window controls (minimize, maximize, close). The console output is as follows:
Scooter Color is Red
This is Tubeless tyre

Car Type :- Ferrari
This is Tubeless tyre

C:\Users\DELL\source\repos\SYCS_2_c\SYCS_2_d\bin\Debug\net6.0\SYCS_2_d.exe (process 16672) exited with code 0.
Press any key to close this window . . .
The console text is white on a black background. There is a small upward-pointing arrow icon in the top right corner of the console area.

d) Namespaces:-

1) Example of namespace in C# where one namespace program accesses another namespace program.

Program:-

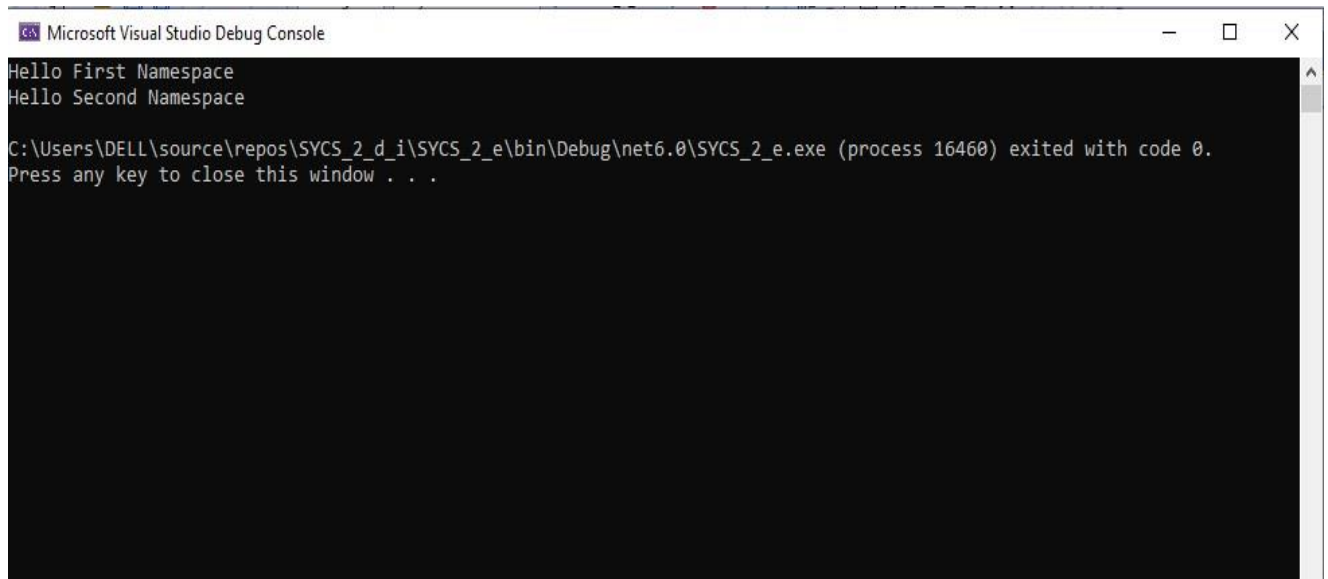
```
using System; namespace
First
{

    public class Hello
    {
        public void sayHello()
        {
            Console.WriteLine("Hello First Namespace");
        }
    }
}
namespace Second
{

    public class Hello
    {
        public void sayHello()
        {
            Console.WriteLine("Hello Second Namespace");
        }
    } }
public class TestNamespace
{

    public static void Main(String[] args)
    {
        First.Hello h1 = new First.Hello();
        Second.Hello h2 = new Second.Hello();
        h1.sayHello();
        h2.sayHello();
    }
}
```

Output:-

A screenshot of the Microsoft Visual Studio Debug Console window. The window has a title bar with the text "Microsoft Visual Studio Debug Console" and standard minimize, maximize, and close buttons. The console output is as follows:

```
Hello First Namespace  
Hello Second Namespace  
  
C:\Users\DELL\source\repos\SYCS_2_d_i\SYCS_2_e\bin\Debug\net6.0\SYCS_2_e.exe (process 16460) exited with code 0.  
Press any key to close this window . . .
```

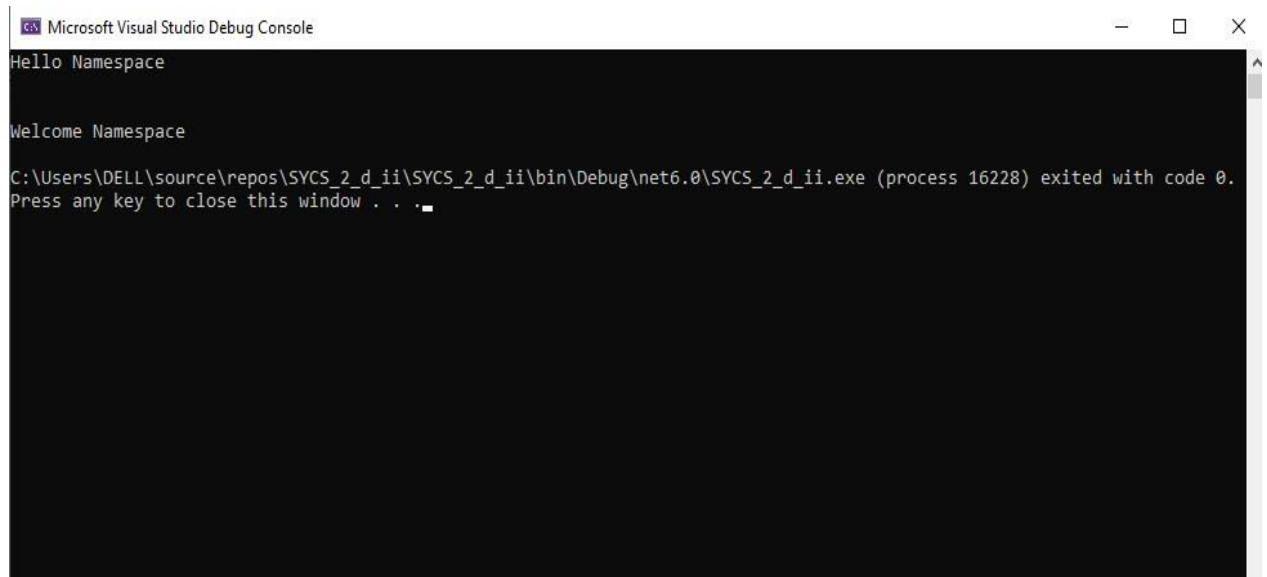
2) Example of namespace where we are using "using" keyword so that we don't have to use a complete name for accessing a namespace program.

Program:-

```
using System;  
using First; using
```

```
Second;
namespace First
{
    public class Hello
    {
        public void sayHello()
        {
            Console.WriteLine("Hello Namespace");
        }
    }
}
namespace Second
{
    public class Welcome
    {
        public void sayWelcome()
        {
            Console.WriteLine("\n\nWelcome Namespace");
        }
    }
}
public class TestNamespace
{
    public static void Main(String[] args)
    {
        Hello h1 = new Hello();
        Welcome w1 = new Welcome();
        h1.sayHello();
        w1.sayWelcome();
    }
}
```

Output:-

A screenshot of the Microsoft Visual Studio Debug Console window. The window has a title bar with the text "Microsoft Visual Studio Debug Console" and standard window controls (minimize, maximize, close). The console output is as follows:

```
Hello Namespace  
  
Welcome Namespace  
  
C:\Users\DELL\source\repos\SYCS_2_d_ii\SYCS_2_d_ii\bin\Debug\net6.0\SYCS_2_d_ii.exe (process 16228) exited with code 0.  
Press any key to close this window . . .
```

Practical No. 3

**Aim:- Design Desktop Application Page with a)
Server controls b) Web controls and
demonstrate the use of AutoPostBack**

a)Server Controls:-

Form1.cs [Design] Page:-

Form1

Number 1

Number 2

<input type="radio"/> + (Add)	<input type="radio"/> - (Subtract)
<input type="radio"/> * (Multiply)	<input type="radio"/> / (Divide)

Result:- 0

Properties Table:-

Control	ID (Name)	Text
Label	label1	Number_1
Label	label2	Number_2
TextBox	textBox1	-
TextBox	textBox2	-
RadioButton	radioButton1	+ (Add)
RadioButton	radioButton2	- (Subtract)
RadioButton	radioButton3	* (Multiply)
RadioButton	radioButton4	/ (Divide)

Label	label3	Result
Label	label4	0

Form1.cs Page:-

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

```
namespace SYCS_3_1_a
```

```
{
    public partial class Form1 : Form
    {
        public
```

```
Form1()
```

```
{
    InitializeComponent();
}
```

```
int number1, number2, result; private void
radioButton3_CheckedChanged(object sender, EventArgs e)
```

```
{
    number1 = int.Parse(textBox1.Text);
    number2 = int.Parse(textBox2.Text);
```

```
    result = number1 * number2;
    label4.Text = result.ToString();
}
```

```
private void radioButton4_CheckedChanged(object sender, EventArgs e)
{
    number1 = int.Parse(textBox1.Text);
    number2 = int.Parse(textBox2.Text);
```

```

        result = number1 / number2;
label4.Text = result.ToString();
    }

    private void radioButton2_CheckedChanged(object sender, EventArgs e)
    {
        number1 = int.Parse(textBox1.Text);
number2 = int.Parse(textBox2.Text);

        result = number1 - number2;
        label4.Text = result.ToString();
    }

    private void radioButton1_CheckedChanged(object sender, EventArgs e)
    {
        number1 = int.Parse(textBox1.Text);
number2 = int.Parse(textBox2.Text);

        result = number1 + number2;
        label4.Text = result.ToString();
    }
}
}

```

Output:-

Form1

Number 1

Number 2

☒ + (Add) ☐ - (Subtract)

☐ * (Multiply) ☐ / (Divide)

Result:- 33

**b) Web controls and demonstrate the use of
AutoPostBack:-**

Form1.cs [Design] Page:-

The screenshot shows a standard Windows application window with the title 'Form1'. Inside the window, there are two text boxes for input, each preceded by a label 'Number 1' and 'Number 2' respectively. Below these is a dropdown menu with the text 'Select' and a small arrow icon. At the bottom, there is a label 'Result:-' followed by the value '0'.

Properties Table:-

Control	ID (Name)	Text
Label	label1	Number1
Label	label2	Number2
ComboBox	comboBox1	Select
Label	label3	Result
Label	label4	0

Form1.cs Page:-

```
using System; using
System.Collections.Generic; using
System.ComponentModel;
using System.Data; using
System.Drawing; using
System.Linq; using
```

```
System.Text; using
System.Threading.Tasks;
using System.Windows.Forms;
```

```
namespace SYCS_3_b
```

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

        private void label2_Click(object sender, EventArgs e)
        {

        }

        private void comboBox1_SelectedIndexChanged(object sender, EventArgs
e)    {        string s;
        int number1, number2;

        number1 = int.Parse(textBox1.Text);
number2 = int.Parse(textBox2.Text);

        s = comboBox1.SelectedItem.ToString();

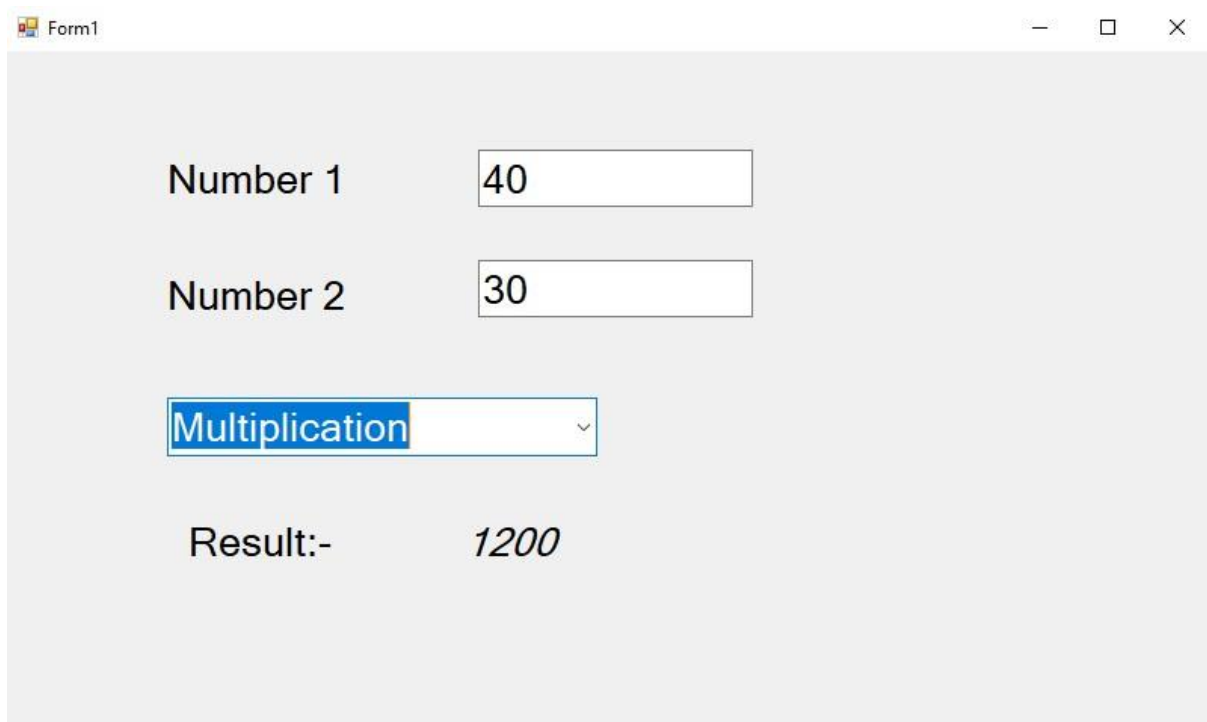
        if (s == "Addition")
        {
            label4.Text = (number1 + number2).ToString();
        }

        if (s == "Subtraction")
        {
            label4.Text = (number1 - number2).ToString();
        }

        if (s == "Multiplication")
        {
            label4.Text = (number1 * number2).ToString();
        }
    }
}
```

```
        if (s == "Division")
        {
            label4.Text = (number1 / number2).ToString();
        }
    }
}
```

Output:-



The screenshot shows a Windows application window titled "Form1". Inside the window, there is a user interface for a calculator. It features two text boxes for input: "Number 1" with the value "40" and "Number 2" with the value "30". Below these is a dropdown menu currently displaying "Multiplication". At the bottom, the text "Result:-" is followed by the calculated value "1200".

Practical No. 4

**Aim:- Design Desktop Application Page with:- a)
Calendar b) Validation Control**

a) Calendar:-

Form1.cs [Design] Page:-

Properties Table:-

Control	ID (Name)	Text
Label	label1	Select Your Date of Birth:-
DateTimePicker	dateTimePicker1	-
Button	button1	SUBMIT
Label	label2	Your Current Age is:-
Label	label3	0

Form1.cs Page:-

```

using System; using
System.Collections.Generic; using
System.ComponentModel; using
System.Data; using
System.Drawing; using
System.Linq; using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

```



```
namespace SYCS_4_1
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();

            private void button1_Click(object sender, EventArgs e)
            {
                DateTime dob;        dob =
dateTimePicker1.Value;
                int age = (DateTime.Now.Year - dob.Year);

                label3.Text = age.ToString();

            }
        }
    }
}
```

Output:-

The screenshot shows a Windows application window titled "Form1". Inside the window, the text "Select Your Date of Birth :-" is displayed. Below this text is a date picker control showing "01 June 2003". A "SUBMIT" button is located below the date picker. After clicking the button, the text "Your Current Age is :- 19" is displayed on the form.

b) Validation Control:-

Form1.cs [Design] Page:-

The image shows a Windows Form titled "Form1". Inside the form, there is a label with the text "Name:-" followed by a text box. Below the text box, there is a button with the text "SUBMIT". The button is currently selected, as indicated by a dashed border and small square handles at the corners.

Properties Table:-

Control	ID (Name)	Text
Label	label1	Name:-
TextBox	textBox1	Go to Events tab → Focus → Validating → Write 'textBox1_Validating'
Button	button1	SUBMIT
ErrorProvider	errorProvider1	-

Form1.cs Page:-

```

using System; using
System.Collections.Generic; using
System.ComponentModel;
using System.Data; using
System.Drawing; using
System.Linq; using
System.Text; using
System.Threading.Tasks;
using System.Windows.Forms;

namespace WindowsFormsApp1
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();

            private void textBox1_Validating(object sender, CancelEventArgs e)
            {
                if (string.IsNullOrEmpty(textBox1.Text))
                {
                    e.Cancel = true;
                    textBox1.Focus();
                    errorProvider1.SetError(textBox1, "Name should not be left blank!");
                }
                else
                {
                    e.Cancel = false;
                    errorProvider1.SetError(textBox1, "");
                }
            }

            private void button1_Click(object sender, EventArgs e)
            {
                if (ValidateChildren(ValidationConstraints.Enabled))
                {
                    MessageBox.Show(textBox1.Text, "Demo App - Message!");
                }
            }
        }
    }
}

```

```
}  
}  
}
```

Output:-

