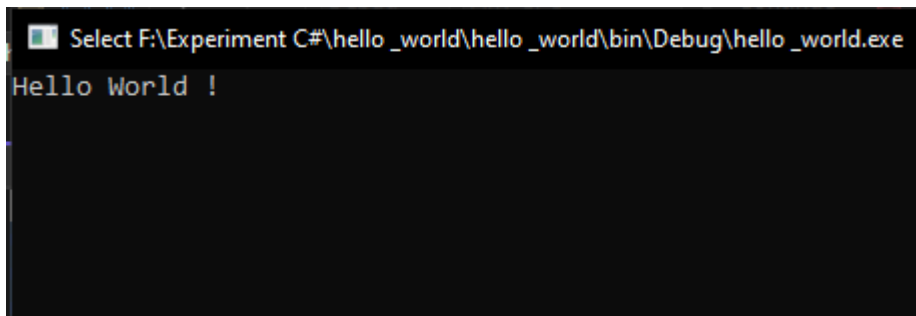


Experiment No : 1

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

namespace hello__world
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Hello World !");
            Console.ReadLine();
        }
    }
}
```

Output:

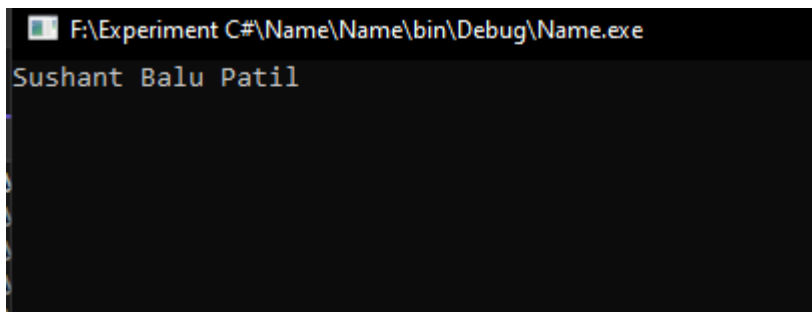


Experiment No : 2

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

namespace Name
{
    internal class Program
    {
        string Full_Name = "Sushant Balu Patil";

        static void Main(string[] args)
        {
            Program Name = new Program();
            Console.WriteLine(Name.Full_Name);
            Console.ReadLine();
        }
    }
}
```

Output:

Experiment No : 3**Inheritance.**

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

namespace inherit
{
    class Input
    {
        protected int Width;
        protected int Height;

        public void SetWidth(int w)
        {
            Width = w;
        }

        public void SetHeight(int h)
        {
            Height = h;
        }
    }

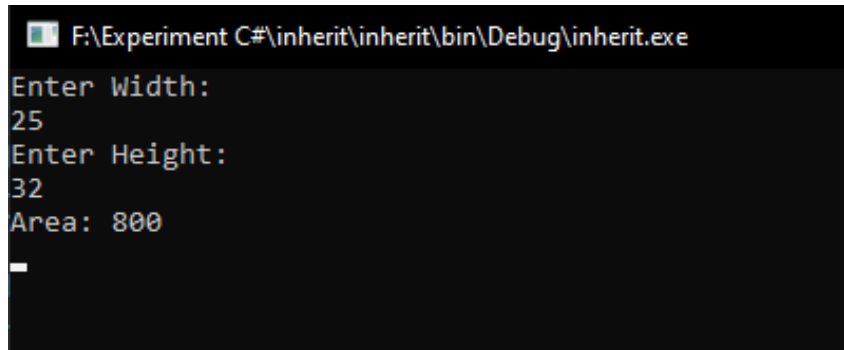
    class Rectangle : Input
    {
        public int GetArea()
        {
            return Width * Height;
        }
    }

    internal class Program
    {
        static void Main(string[] args)
        {
            Rectangle obj = new Rectangle();
            Console.WriteLine("Enter Width:");
            int width = Convert.ToInt32(Console.ReadLine());
            obj.SetWidth(width);

            Console.WriteLine("Enter Height:");
            int height = Convert.ToInt32(Console.ReadLine());
            obj.SetHeight(height);

            int area = obj.GetArea();
            Console.WriteLine("Area: " + area);
            Console.ReadLine();
        }
    }
}
```

Output :



```
F:\Experiment C#\inherit\inherit\bin\Debug\inherit.exe
Enter Width:
25
Enter Height:
32
Area: 800
_
```

Experiment No : 4**Calculator**

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

namespace Calculator
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("===== Calculator =====");
            Console.WriteLine("Enter First Number : ");
            int num1 = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter Second Number : ");
            int num2 = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("=====");

            Console.WriteLine("1.Addition\t\n2.Substraction\t\n3.Multiplication\t\n4.Division");

            Console.WriteLine("=====");

            Console.WriteLine("Enter Your Choice : ");
            int ch = Convert.ToInt32(Console.ReadLine());

            switch(ch)
            {
                case 1: Console.WriteLine("Addition Of Two Number Is : " + (num1+num2));
                    break;
                case 2: Console.WriteLine("Substraction Of Two Number is : "+(num1-num2));
                    break;
                case 3: Console.WriteLine("Multiplication Of Two Number is : " + (num1 * num2));
                    break;
                case 4: Console.WriteLine("Division Of Two NUmber is : "+(num1 / num2));
                    break;
                default: Console.WriteLine("Enter valid Entry !");
                    break;
            }
            Console.ReadLine();
        }
    }
}
```

Output :

```
F:\Experiment C#\Calculator\Calculator\bin\Debug\Calculator.exe
===== Calculator =====
Enter First Number :
20
Enter Second Number :
30
=====
1.Addition
2.Substraction
3.Multiplication
4.Division
=====
Enter Your Choice :
1
Addition Of Two Number Is : 50
```

```
F:\Experiment C#\Calculator\Calculator\bin\Debug\Calculator.exe
===== Calculator =====
Enter First Number :
50
Enter Second Number :
45
=====
1.Addition
2.Substraction
3.Multiplication
4.Division
=====
Enter Your Choice :
2
Substraction Of Two Number is : 5
```

```
F:\Experiment C#\Calculator\Calculator\bin\Debug\Calculator.exe
===== Calculator =====
Enter First Number :
25
Enter Second Number :
25
=====
1.Addition
2.Substraction
3.Multiplication
4.Division
=====
Enter Your Choice :
3
Multiplication Of Two Number is : 625
```

Experiment No : 5

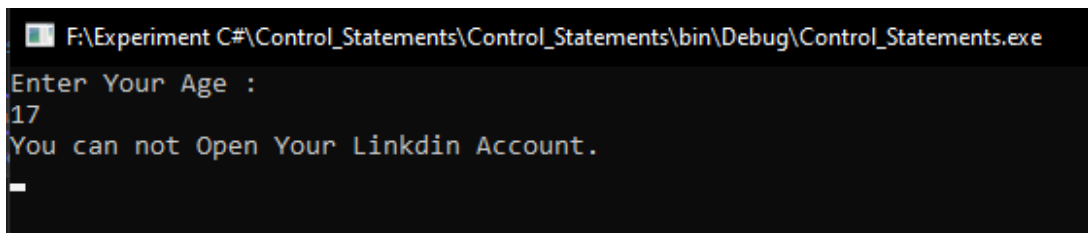
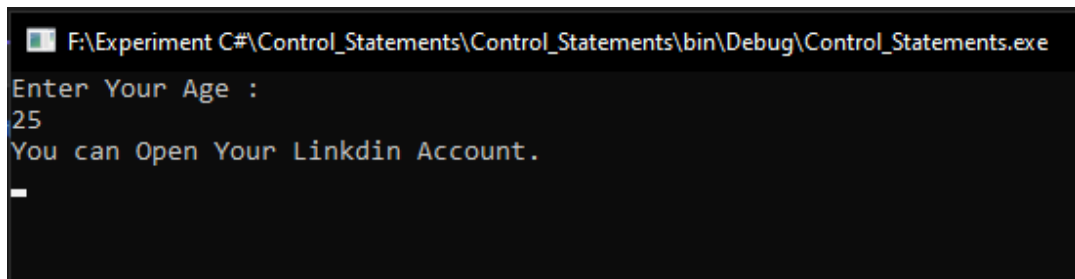
1. if-else

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

namespace Control_Statements
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter Your Age : ");
            int age = Convert.ToInt32(Console.ReadLine());

            if (age > 18 ) {
                Console.WriteLine("You can Open Your Linkdin Account.");
            }
            else
            {
                Console.WriteLine("You can not Open Your Linkdin Account.");
            }
            Console.ReadLine();
        }
    }
}
```

Output :



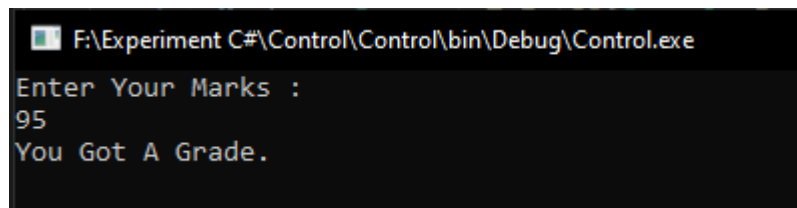
2. Nested if else

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

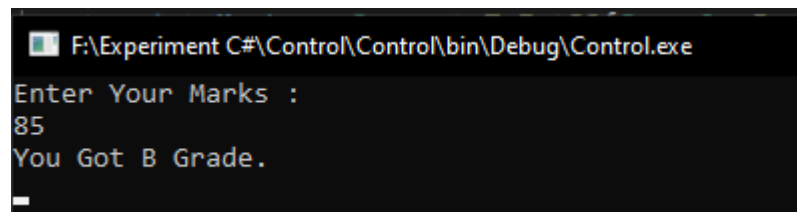
namespace Control
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter Your Marks : ");
            int Marks = Convert.ToInt32(Console.ReadLine());

            if(Marks >=90 ) {
                Console.WriteLine("You Got A Grade.");
            }
            else if(Marks >= 75)
            {
                Console.WriteLine("You Got B Grade. ");
            }
            else if (Marks >= 60)
            {
                Console.WriteLine("You Got C Grade. ");
            }
            else
            {
                Console.WriteLine("You Got D Grade. ");
            }
            Console.ReadLine();
        }
    }
}
```

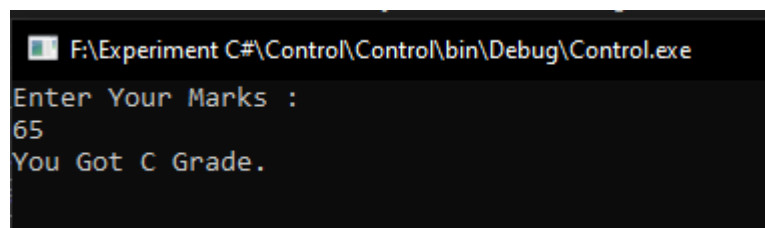
Output :



F:\Experiment C#\Control\Control\bin\Debug\Control.exe
Enter Your Marks :
95
You Got A Grade.



F:\Experiment C#\Control\Control\bin\Debug\Control.exe
Enter Your Marks :
85
You Got B Grade.
_



F:\Experiment C#\Control\Control\bin\Debug\Control.exe
Enter Your Marks :
65
You Got C Grade.

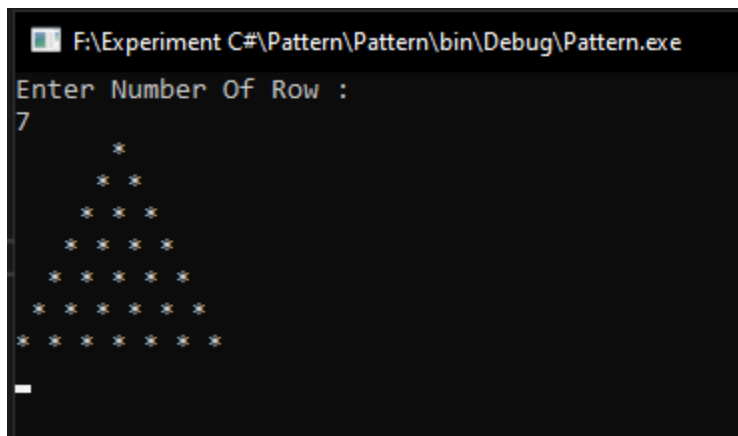
3.while

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

namespace Pattern
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter Number Of Row :");
            int n = Convert.ToInt32(Console.ReadLine());

            int i = 0;
            while(n > i) {
                int space = 0;
                while(space < n-i-1) {
                    Console.Write(" ");
                    space++;
                }
                int j = 0;
                while(j < i+1) {
                    Console.Write("* ");
                    j++;
                }
                Console.WriteLine();
                i++;
            }
            Console.ReadLine();
        }
    }
}
```

Output :



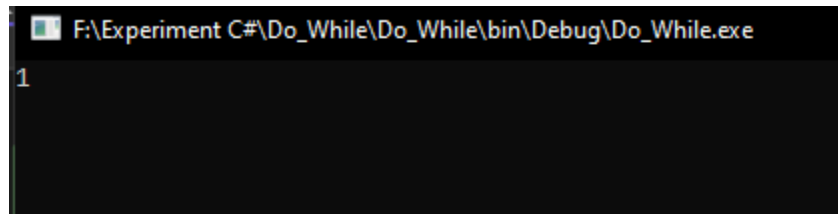
```
F:\Experiment C#\Pattern\Pattern\bin\Debug\Pattern.exe
Enter Number Of Row :
7
      *
     * *
    * * *
   * * * *
  * * * * *
 * * * * * *
* * * * * * *
```

4.Do while

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

namespace Do_While
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int i = 1;
            do
            {
                Console.WriteLine(i);
                i++;
            }
            while (i > 10);
            Console.ReadLine();
        }
    }
}
```

Output :



5. Switch

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

namespace Calculator
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("===== Calculator =====");
            Console.WriteLine("Enter First Number : ");
            int num1 = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter Second Number : ");
            int num2 = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("=====");

            Console.WriteLine("1.Addition\t\n2.Substraction\t\n3.Multiplication\t\n4.Division");

            Console.WriteLine("=====");

            Console.WriteLine("Enter Your Choice : ");
            int ch = Convert.ToInt32(Console.ReadLine());

            switch(ch)
            {
                case 1:Console.WriteLine("Addition Of Two Number Is : " + (num1+num2));
                        break;
                case 2:Console.WriteLine("Substraction Of Two Number is : "+(num1-num2));
                        break;
                case 3:Console.WriteLine("Multiplication Of Two Number is : " + (num1 * num2));
                        break;
                case 4:Console.WriteLine("Division Of Two NUmber is : "+(num1 / num2));
                        break;
                default: Console.WriteLine("Enter valid Entry !");
                        break;
            }
            Console.ReadLine();
        }
    }
}
```

Output :

```
F:\Experiment C#\Calculator\Calculator\bin\Debug\Calculator.exe
===== Calculator =====
Enter First Number :
20
Enter Second Number :
30
=====
1.Addition
2.Substraction
3.Multiplication
4.Division
=====
Enter Your Choice :
1
Addition Of Two Number Is : 50
```

```
F:\Experiment C#\Calculator\Calculator\bin\Debug\Calculator.exe
===== Calculator =====
Enter First Number :
50
Enter Second Number :
45
=====
1.Addition
2.Substraction
3.Multiplication
4.Division
=====
Enter Your Choice :
2
Substraction Of Two Number is : 5
```

```
F:\Experiment C#\Calculator\Calculator\bin\Debug\Calculator.exe
===== Calculator =====
Enter First Number :
25
Enter Second Number :
25
=====
1.Addition
2.Substraction
3.Multiplication
4.Division
=====
Enter Your Choice :
3
Multiplication Of Two Number is : 625
```

6. For Loop

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

namespace For_Loop
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter number of row : ");
            int n = Convert.ToInt32(Console.ReadLine());

            for (int i = 0; i < n; i++)
            {
                for(int Space = 0; Space < n-i-1; Space++)
                {
                    Console.Write(" ");
                }
                for (int j = 0; j < i + 1; j++)
                {
                    Console.Write("* ");
                }
                Console.WriteLine();
            }
            for(int i = 0; i < n;i++)
            {
                for(int space = 0; space < i; space++)
                {
                    Console.Write(" ");
                }
                for(int j = 0; j<n-i; j++)
                {
                    Console.Write("* ");
                }
                Console.WriteLine();
            }
            Console.ReadLine();
        }
    }
}
```

Output :



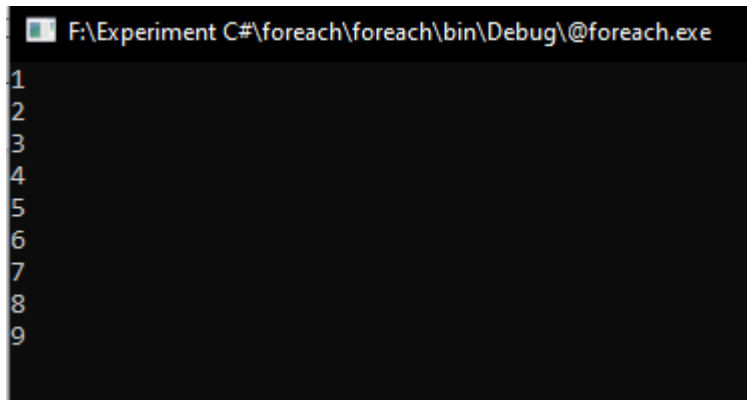
7. Foreach

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

namespace @foreach
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int[] ar = { 1, 2, 3, 4, 5, 6, 7, 8, 9 };

            foreach (int i in ar)
            {
                Console.WriteLine(i);
            }
            Console.ReadLine();
        }
    }
}
```

Output :

A screenshot of a Windows command prompt window. The title bar shows the file path "F:\Experiment C#\foreach\foreach\bin\Debug\@foreach.exe". The console output displays the numbers 1 through 9, each on a new line, representing the elements of the array being iterated over by the foreach loop.

```
F:\Experiment C#\foreach\foreach\bin\Debug\@foreach.exe
1
2
3
4
5
6
7
8
9
```

Experiment No : 6

1. Static class

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

namespace Static
{
    public static class customer
    {
        static int customerid;
        static string customername;
        static string customerorder;
        static int orderprice;

        public static void customerdetails()
        {
            Console.WriteLine("Enter Product Id : ");
            customerid = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter Customer Name : ");
            customername = Convert.ToString(Console.ReadLine());

            Console.WriteLine("Enter Customer Order : ");
            customerorder = Convert.ToString(Console.ReadLine());

            Console.WriteLine("Enter Order Price : ");
            orderprice = Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("-----");
        }

        public static void orderdiscount()
        {
            int discount;
            Console.WriteLine("Hello" + " " + customername + " " + "Your Order Name Is :" +
customerorder, "\n");

            Console.WriteLine(customername + "Your Order Price Is :" + orderprice, "\n");

            discount = orderprice / 10;
            Console.WriteLine("Your Order Discount Is :" + discount, "\n");
            int finalprice;

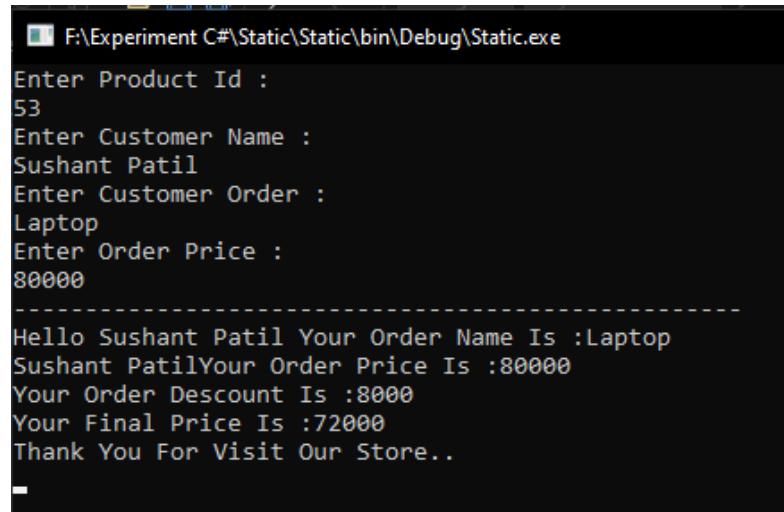
            finalprice = orderprice - discount;

            Console.WriteLine("Your Final Price Is :" + finalprice, "\n");

            Console.WriteLine("Thank You For Visit Our Store..");
        }
    }
}
```

```
internal class Program
{
    static void Main(string[] args)
    {
        customer.customerdetails();
        customer.orderdiscount();
        Console.ReadLine();
    }
}
```

Output :



```
F:\Experiment C#\Static\Static\bin\Debug\Static.exe
Enter Product Id :
53
Enter Customer Name :
Sushant Patil
Enter Customer Order :
Laptop
Enter Order Price :
80000
-----
Hello Sushant Patil Your Order Name Is :Laptop
Sushant PatilYour Order Price Is :80000
Your Order Discount Is :8000
Your Final Price Is :72000
Thank You For Visit Our Store..
_
```


2. Partial class

Program 1.

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

namespace Main_Class
{
    public partial class Class1
    {
        public void FirstName()
        {
            Console.WriteLine("hello, Anna..");
        }
    }
}
```

Program 2.

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

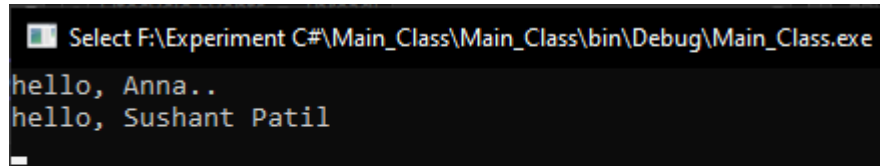
namespace Main_Class
{
    public partial class Class1
    {
        public void FullName()
        {
            Console.WriteLine("hello, Sushant Patil");
        }
    }
}
```

Main Program.

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

namespace Main_Class
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Class1 obj = new Class1();
            obj.FirstName();
            obj.FullName();
            Console.ReadLine();
        }
    }
}
```

Output :



The screenshot shows a Windows command prompt window with a title bar that reads "Select F:\Experiment C#\Main_Class\Main_Class\bin\Debug\Main_Class.exe". The command prompt displays two lines of output: "hello, Anna.." followed by "hello, Sushant Patil". A white cursor is visible on the line following the second output.

```
Select F:\Experiment C#\Main_Class\Main_Class\bin\Debug\Main_Class.exe  
hello, Anna..  
hello, Sushant Patil  
_
```

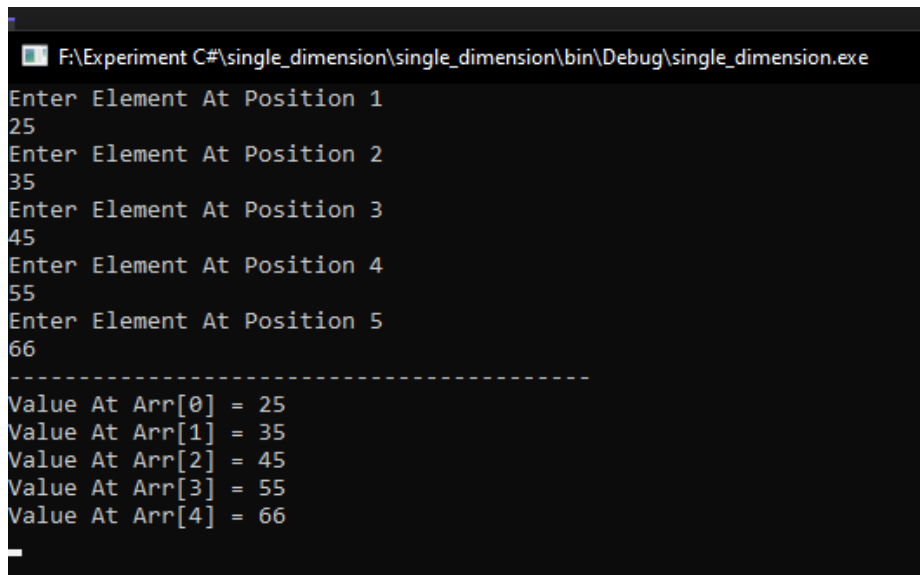
Experiment No : 7

1. single dimensional:

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

namespace single_dimension
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int[] ar = new int[5];
            for(int i=0; i <= 4; i++)
            {
                Console.WriteLine("Enter Element At Position "+(i+1));
                ar[i] = Convert.ToInt32(Console.ReadLine());
            }
            Console.WriteLine("-----");
            for(int i = 0; i <= 4; i++)
            {
                Console.WriteLine("Value At Arr["+i+"] = " + ar[i]);
            }
            Console.ReadLine();
        }
    }
}
```

Output :



```
F:\Experiment C#\single_dimension\single_dimension\bin\Debug\single_dimension.exe
Enter Element At Position 1
25
Enter Element At Position 2
35
Enter Element At Position 3
45
Enter Element At Position 4
55
Enter Element At Position 5
66
-----
Value At Arr[0] = 25
Value At Arr[1] = 35
Value At Arr[2] = 45
Value At Arr[3] = 55
Value At Arr[4] = 66
```

2. Multidimensional :

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

namespace Multidimension
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter Matrix size : ");
            int n = int.Parse(Console.ReadLine());
            int m = n;
            int[,] a = new int[n, m];

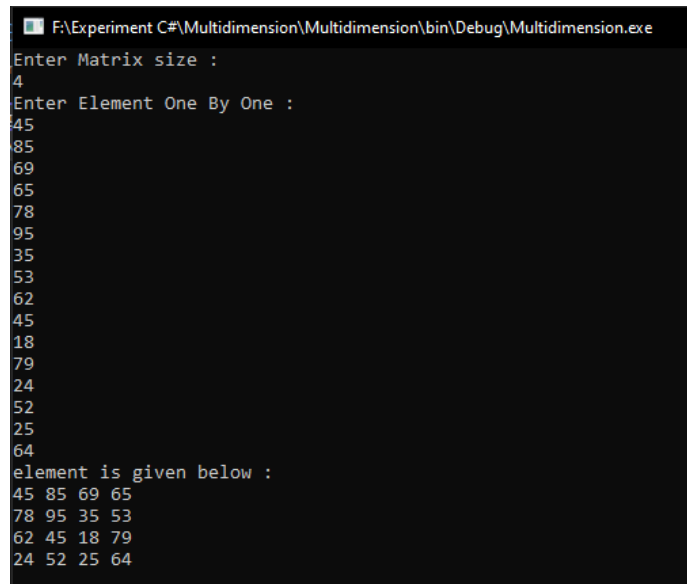
            Console.WriteLine("enter element one by one : ");

            for (int i = 0; i < n; i++)
            {
                for (int j = 0; j < m; j++)
                {
                    a[i, j] = Convert.ToInt32(Console.ReadLine());
                }
            }

            Console.WriteLine("element is given below : ");

            for (int i = 0; i < n; i++)
            {
                for (int j = 0; j < m; j++)
                {
                    Console.Write(a[i, j] + " ");
                }
                Console.WriteLine(" ");
            }
            Console.ReadKey();
        }
    }
}
```

Output:



```
F:\Experiment C#\Multidimension\Multidimension\bin\Debug\Multidimension.exe
Enter Matrix size :
4
Enter Element One By One :
45
85
69
65
78
95
35
53
62
45
18
79
24
52
25
64
element is given below :
45 85 69 65
78 95 35 53
62 45 18 79
24 52 25 64
```

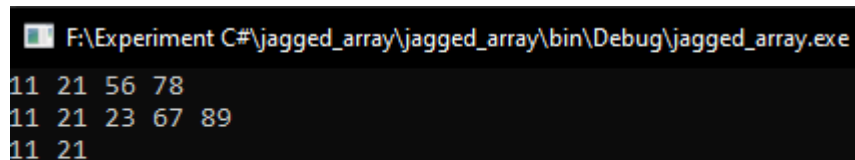
3.Jagged Array.

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

namespace jagged_array
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int[][] arr = new int[3][]
        {
            new int[] { 11,21,56,78},
            new int[] { 11,21,23,67,89},
            new int[] { 11,21,}
        };

            for (int i = 0; i < arr.Length; i++)
            {
                for (int j = 0; j < arr[i].Length; j++)
                {
                    Console.Write(arr[i][j] + " ");
                }
                System.Console.WriteLine();
            }
            Console.ReadLine();
        }
    }
}
```

Output :



The screenshot shows a console window with the title bar "F:\Experiment C#\jagged_array\jagged_array\bin\Debug\jagged_array.exe". The output of the program is displayed on three lines: "11 21 56 78", "11 21 23 67 89", and "11 21".

Experiment No : 8**Interface.**

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

namespace Interface
{
    interface allarea
    {
        void rectangle_area();
        void triangle_area();
        void circle_area();
    }
    class angle : allarea
    {
        public void rectangle_area()
        {
            Console.WriteLine("=====Rectangle Area ===== ");
            Console.WriteLine("Enter the Height : ");
            int h = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter the Width : ");
            int w = Convert.ToInt32(Console.ReadLine());

            int area;
            area = h * w;
            Console.WriteLine("Rectangle Area = " + area);
        }

        public void triangle_area()
        {
            Console.WriteLine("=====Triangel Area=====");
            Console.WriteLine("Enter Height : ");
            double h = Convert.ToDouble(Console.ReadLine());

            Console.WriteLine("Enter Base : ");
            double b = Convert.ToDouble(Console.ReadLine());

            double area = 0.5f * h * b;
            Console.WriteLine("Area of Triangle : " + area);
        }

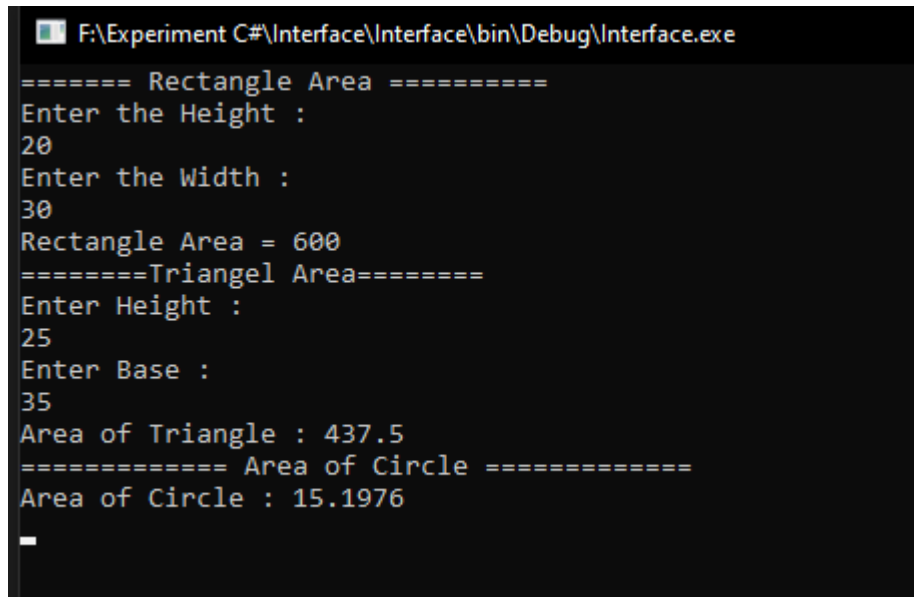
        public void circle_area()
        {
            Console.WriteLine("=====Area of Circle =====");
            float r = 2.2f;
            float area = 3.14f * r * r;
            Console.WriteLine("Area of Circle : " + area);
        }
    }
    internal class Program
```

```

{
    static void Main(string[] args)
    {
        angle angle = new angle();
        angle.rectangle_area();
        angle.triangle_area();
        angle.circle_area();
        Console.ReadLine();
    }
}

```

Output :



```

F:\Experiment C#\Interface\Interface\bin\Debug\Interface.exe
===== Rectangle Area =====
Enter the Height :
20
Enter the Width :
30
Rectangle Area = 600
=====Triangel Area=====
Enter Height :
25
Enter Base :
35
Area of Triangle : 437.5
===== Area of Circle =====
Area of Circle : 15.1976
_

```

Experiment No : 9

Operator Overloading.

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

namespace operator_overloading
{
    class complex
    {
        private int x;
        private int y;

        public complex()
        {
        }

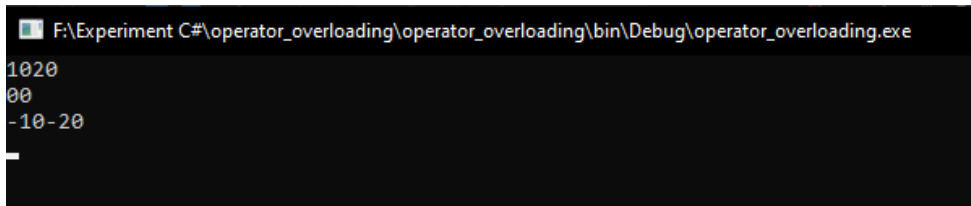
        public complex(int i, int j)
        {
            x = i;
            y = j;
        }

        public void showxy()
        {
            Console.WriteLine("{0}{1}", x, y);
        }

        public static complex operator -(complex c)
        {
            complex temp = new complex();
            temp.x = -c.x;
            temp.y = -c.y;
            return temp;
        }
    }

    internal class Program
    {
        static void Main(string[] args)
        {
            complex c1 = new complex(10, 20);
            c1.showxy();
            complex c2 = new complex();
            c2.showxy();
            c2 = -c1;
            c2.showxy();
            Console.ReadLine();
        }
    }
}
```

Output :



```
F:\Experiment C#\operator_overloading\operator_overloading\bin\Debug\operator_overloading.exe
1020
00
-10-20
```


Experiment No : 10

String Operation.

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace String_Operation
{
    internal class Program
    {
        static void Main(string[] args)
        {
            string str = "Easy Software";
            Console.WriteLine(str);
            Console.WriteLine("-----ToUpper-----");
            Console.WriteLine(str.ToUpper());
            Console.WriteLine("-----ToLower-----");
            Console.WriteLine(str.ToLower());
            Console.WriteLine("-----length of string-----");
            Console.WriteLine(str.Length);
            Console.WriteLine("-----charAt 2 index-----");
            Console.WriteLine(str[2]);
            Console.WriteLine("-----startswith So-----");
            Console.WriteLine(str.StartsWith("So"));
            Console.WriteLine("-----Endswith re-----");
            Console.WriteLine(str.EndsWith("re"));
            Console.WriteLine("-----CompareTo-----");
            Console.WriteLine(str.CompareTo("Easy Software"));
            Console.WriteLine(str.CompareTo("Easy software"));
            Console.WriteLine("-----Equals-----");
            Console.WriteLine(str.Equals("easy software"));
            Console.WriteLine(str.Equals("Easy Software"));
            Console.WriteLine("-----replace-----");
            string newstr = str.Replace("Easy", "hard");
            Console.WriteLine(newstr);
            Console.ReadLine();
        }
    }
}

```

Output :

```

F:\Experiment C#\String_Operation\String_Operation\bin\Debug\String_Operation.exe
Easy Software
-----ToUpper-----
EASY SOFTWARE
-----ToLower-----
easy software
-----length of string-----
13
-----charAt 2 index-----
S
-----startswith So-----
False
-----Endswith re-----
True
-----CompareTo-----
0
1
-----Equals-----
False
True
-----replace-----
hard Software

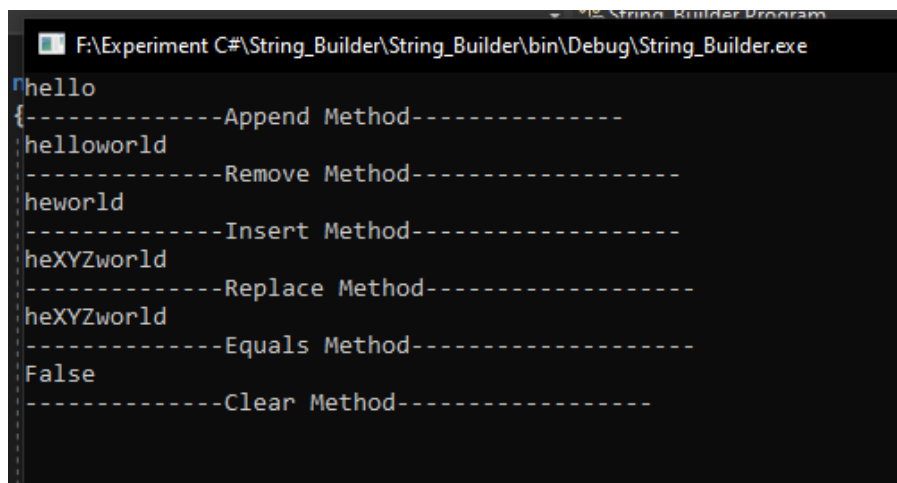
```

String Builder Method.

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

namespace String_Builder
{
    internal class Program
    {
        static void Main(string[] args)
        {
            StringBuilder sb = new StringBuilder("hello");
            Console.WriteLine(sb);
            Console.WriteLine("-----Append Method-----");
            Console.WriteLine(sb.Append("world"));
            Console.WriteLine("-----Remove Method-----");
            sb.Remove(2, 3);
            Console.WriteLine(sb);
            Console.WriteLine("-----Insert Method-----");
            Console.WriteLine(sb.Insert(2, "XYZ"));
            Console.WriteLine("-----Replace Method-----");
            Console.WriteLine(sb.Replace("hello", "hi"));
            Console.WriteLine("-----Equals Method-----");
            StringBuilder sb2 = new StringBuilder("hello");
            Console.WriteLine(sb.Equals(sb2));
            Console.WriteLine("-----Clear Method-----");
            Console.WriteLine(sb.Clear());
            Console.ReadLine();
        }
    }
}
```

Output :



The screenshot shows a console window titled "F:\Experiment C#\String_Builder\String_Builder\bin\Debug\String_Builder.exe". The output of the program is as follows:

```
hello
{-----Append Method-----
helloworld
-----Remove Method-----
heworld
-----Insert Method-----
heXYZworld
-----Replace Method-----
heXYZworld
-----Equals Method-----
False
-----Clear Method-----
```

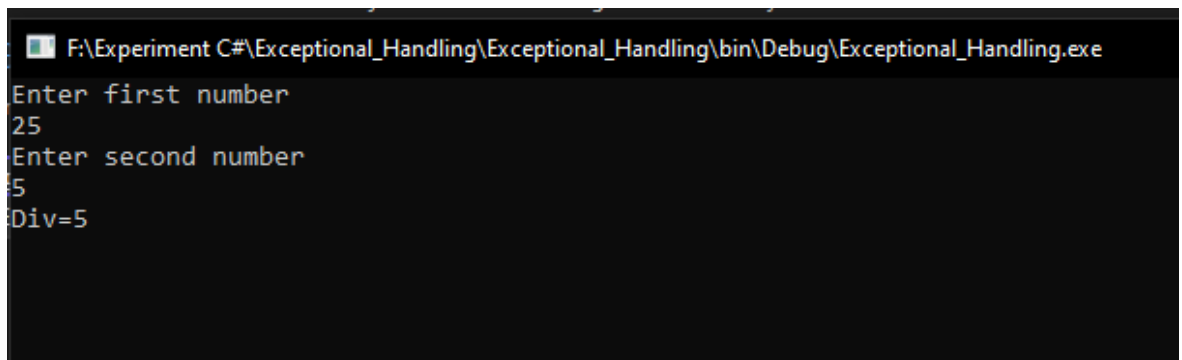
Experiment No : 11

Exception Handling.

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

namespace Exceptional_Handling
{
    internal class Program
    {
        static void Main(string[] args)
        {
            float x, y, z;
            try
            {
                Console.WriteLine("Enter first number");
                y = Convert.ToInt32(Console.ReadLine());
                Console.WriteLine("Enter second number");
                z = Convert.ToInt32(Console.ReadLine());
                if (z != 0)
                {
                    x = y / z;
                    Console.WriteLine("Div=" + x);
                }
                else
                {
                    throw new Exception("Don't put zero in denominator");
                }
            }
            catch (Exception e)
            {
                Console.WriteLine("Error:" + e);
            }
            Console.ReadKey();
        }
    }
}
```

Output :



```
F:\Experiment C#\Exceptional_Handling\Exceptional_Handling\bin\Debug\Exceptional_Handling.exe
Enter first number
25
Enter second number
5
Div=5
```

```
F:\Experiment C#\Exceptional_Handling\Exceptional_Handling\bin\Debug\Exceptional_Handling.exe
Enter first number
25
Enter second number
0
Error: System.Exception: Don't put zero in denominator
   at Exceptional_Handling.Program.Main(String[] args) in F:\Experiment C#\Exceptional_Handling\Exceptional_Handling\Program.cs:line 27
```

Experiment No : 12**Multithreading.**

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

namespace Multithreading
{
    internal class Program
    {
        static void Main(string[] args)
        {
            Thread mainThread = Thread.CurrentThread;
            mainThread.Name = " main thread";
            Console.WriteLine(mainThread.Name);
            countdown();
            countup();

            Console.WriteLine(mainThread.Name + " is completed");
            Console.ReadKey();
        }

        public static void countdown()
        {
            for (int i = 10; i >= 0; i--)
            {
                Console.WriteLine("timer #1: " + i + " seconds");
                Thread.Sleep(1000);
            }
            Console.WriteLine("timer #1 is complete..!");
        }

        public static void countup()
        {
            for (int i = 0; i <= 10; i++)
            {
                Console.WriteLine("timer #2: " + i + " seconds");
                Thread.Sleep(1000);
            }
            Console.WriteLine("timer #2 is complete..!");
        }
    }
}
```

Output :

```
F:\Experiment C#\Multithreading\Multithreading\bin\Debug\Multithreading.exe
main thread
timer #1: 10 seconds
timer #1: 9 seconds
timer #1: 8 seconds
timer #1: 7 seconds
timer #1: 6 seconds
timer #1: 5 seconds
timer #1: 4 seconds
timer #1: 3 seconds
timer #1: 2 seconds
timer #1: 1 seconds
timer #1: 0 seconds
timer #1 is complete..!
timer #2: 0 seconds
timer #2: 1 seconds
timer #2: 2 seconds
timer #2: 3 seconds
timer #2: 4 seconds
timer #2: 5 seconds
timer #2: 6 seconds
timer #2: 7 seconds
timer #2: 8 seconds
timer #2: 9 seconds
timer #2: 10 seconds
timer #2 is complete..!
main thread is completed
```