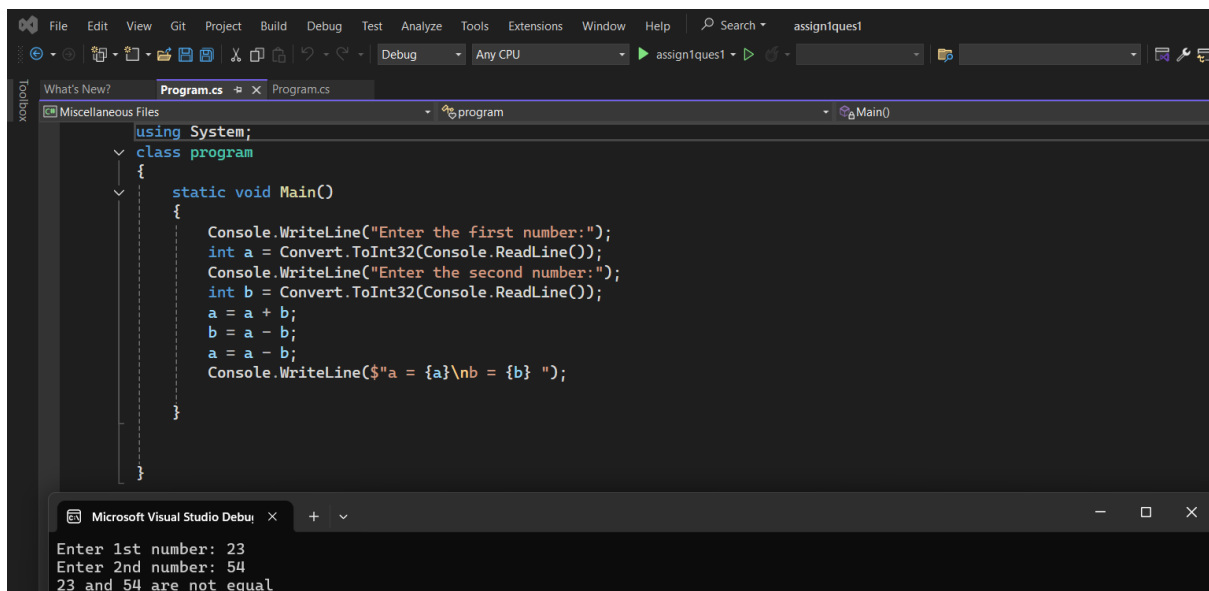


1. Write a C# Sharp program to swap two numbers.using System;

class program

```
{  
    static void Main()  
    {  
        Console.WriteLine("Enter the first number:");  
        int a = Convert.ToInt32(Console.ReadLine());  
        Console.WriteLine("Enter the second number:");  
        int b = Convert.ToInt32(Console.ReadLine());  
  
        a = a + b;  
        b = a - b;  
        a = a - b;  
  
        Console.WriteLine($"a = {a}\nb = {b} ");  
    }  
}
```



The screenshot shows the Microsoft Visual Studio IDE. The main editor window displays the C# code for swapping two numbers. The code is as follows:

```
using System;  
class program  
{  
    static void Main()  
    {  
        Console.WriteLine("Enter the first number:");  
        int a = Convert.ToInt32(Console.ReadLine());  
        Console.WriteLine("Enter the second number:");  
        int b = Convert.ToInt32(Console.ReadLine());  
  
        a = a + b;  
        b = a - b;  
        a = a - b;  
  
        Console.WriteLine($"a = {a}\nb = {b} ");  
    }  
}
```

The output window at the bottom shows the execution results:

```
Enter 1st number: 23  
Enter 2nd number: 54  
23 and 54 are not equal
```

2. Write a C# program that takes a number as input and displays it four times in a row (separated by blank spaces), and then four times in the next row, with no separation. You should do it twice: Use the console. Write and use {0}.

Test Data:

Enter a digit: 25

Expected Output:

25 25 25 25

25252525

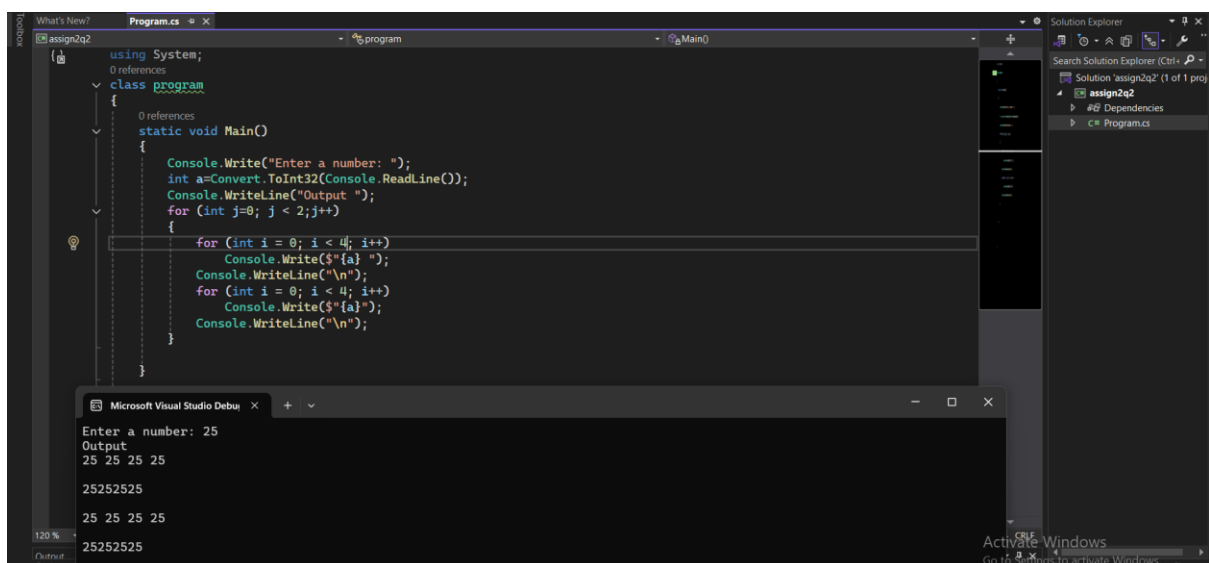
25 25 25 25

25252525

using System;

class program

```
{
    static void Main()
    {
        Console.Write("Enter a number: ");
        int a=Convert.ToInt32(Console.ReadLine());
        Console.WriteLine("Output ");
        for (int j=0; j < 2;j++)
        {
            for (int i = 0; i < 4; i++)
                Console.Write($"{a} ");
            Console.WriteLine("\n");
            for (int i = 0; i < 4; i++)
                Console.Write($"{a}");
            Console.WriteLine("\n");
        }
    }
}
```

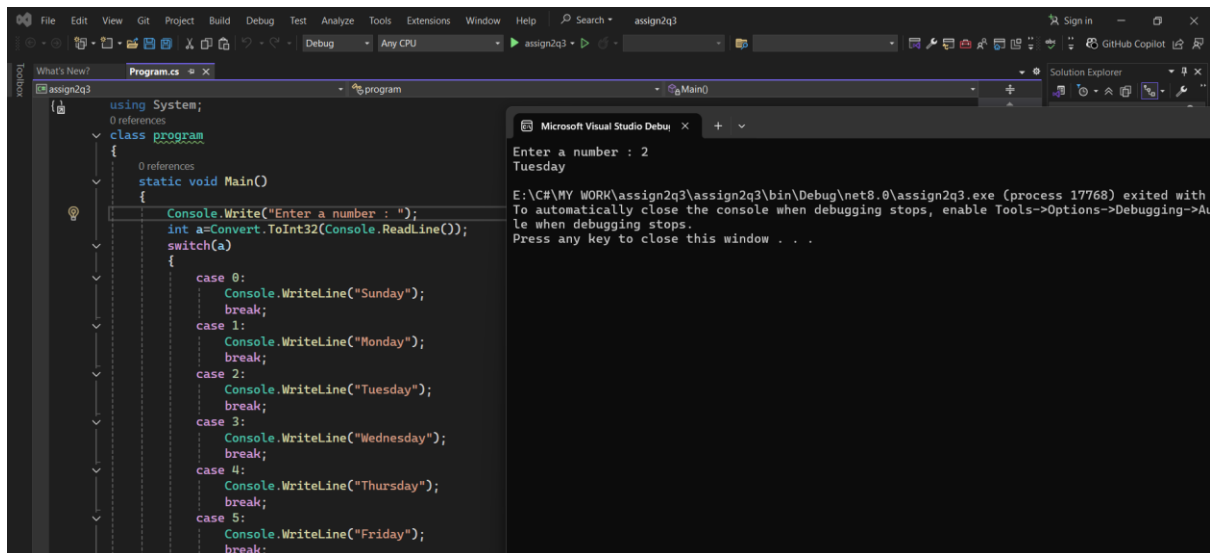


3. Write a C# Sharp program to read any day number as an integer and display the name of the day as a word.

Test Data / input: 2

Expected Output :Tuesday

```
using System;
class program
{
    static void Main()
    {
        Console.Write("Enter a number : ");
        int a=Convert.ToInt32(Console.ReadLine());
        switch(a)
        {
            case 0:
                Console.WriteLine("Sunday");
                break;
            case 1:
                Console.WriteLine("Monday");
                break;
            case 2:
                Console.WriteLine("Tuesday");
                break;
            case 3:
                Console.WriteLine("Wednesday");
                break;
            case 4:
                Console.WriteLine("Thursday");
                break;
            case 5:
                Console.WriteLine("Friday");
                break;
            case 6:
                Console.WriteLine("Saturday");
                break;
            default:
                Console.WriteLine("Invalid");
                break;
        }
    }
}
```



Arrays :

1. Write a Program to assign integer values to an array and then print the following

- a. Average value of Array elements
- b. Minimum and Maximum value in an array

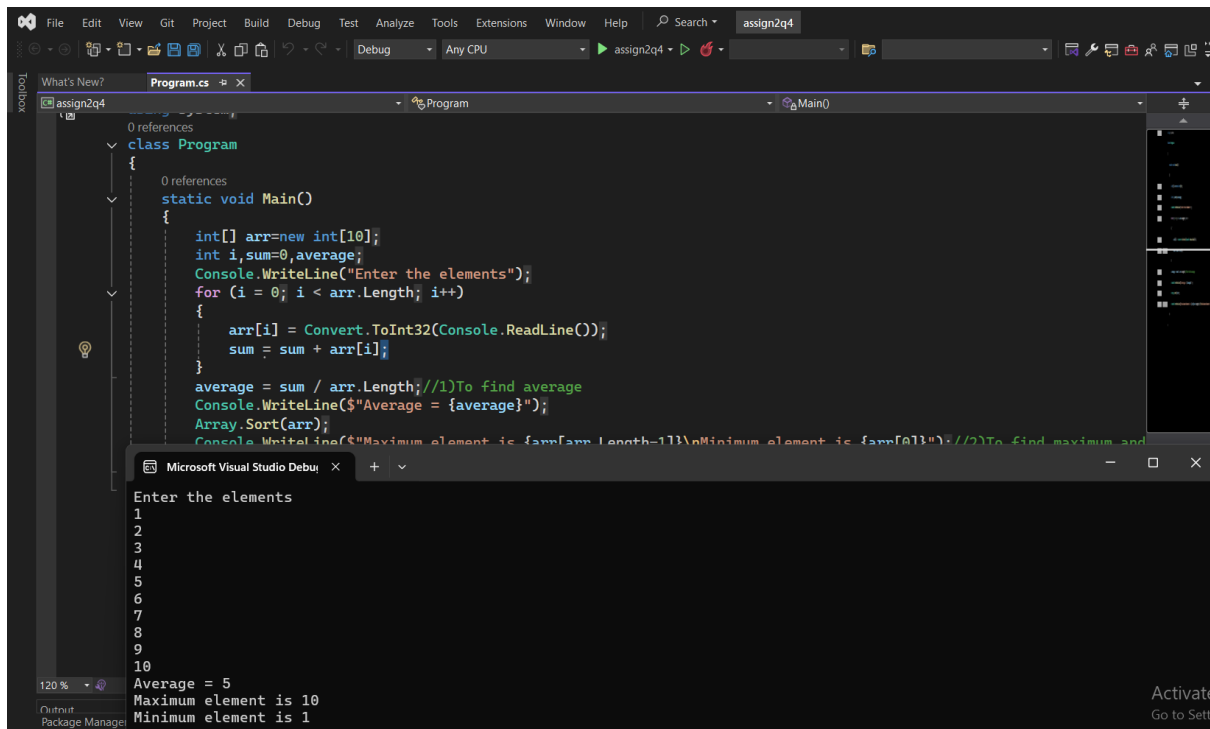
using System;

class Program

```

{
    static void Main()
    {
        int[] arr=new int[10];
        int i,sum=0,average;
        Console.WriteLine("Enter the elements");
        for (i = 0; i < arr.Length; i++)
        {
            arr[i] = Convert.ToInt32(Console.ReadLine());
            sum = sum + arr[i];
        }
        average = sum / arr.Length;//1)To find average
        Console.WriteLine($"Average = {average}");
        Array.Sort(arr);
        Console.WriteLine($"Maximum element is {arr[arr.Length-1]}\nMinimum element is {arr[0]}");//2)To find maximum and minimum elements
    }
}

```



2. Write a program in C# to accept ten marks and display the following

- a. Total
- b. Average
- c. Minimum marks
- d. Maximum marks
- e. Display marks in ascending order
- f. Display marks in descending order

using System;

class Program

{

static void Main()

{

int[] arr = new int[10];

int i, sum = 0, average;

Console.WriteLine("Enter the elements");

for (i = 0; i < arr.Length; i++)

{

arr[i] = Convert.ToInt32(Console.ReadLine());

sum = sum + arr[i];

}

```

        average = sum / arr.Length;//1)To find average
        Console.WriteLine($"Total = {sum}\nAverage = {average}");
        Array.Sort(arr);
        Console.WriteLine($"Maximum marks = {arr[arr.Length - 1]}\nMinimum marks = {arr[0]}");//2)To
find maximum and minimum elements
        Console.Write("Ascending order: ");
        for (i=0;i<arr.Length; i++)
            Console.Write($"{ arr[i]} ");
        Array.Reverse(arr);
        Console.WriteLine("\nDescending order: ");
        for (i = 0; i < arr.Length; i++)
            Console.Write($"{arr[i]} ");
    }
}

```

The screenshot shows the Visual Studio IDE with a C# program named 'Program.cs' open. The code defines a class 'Program' with a static method 'Main()'. Inside 'Main()', an array 'arr' of 10 integers is created. The user is prompted to 'Enter the elements', and the input '1 2 3 4 5 6 7 8 9 10' is shown in the console. The program then calculates the total (55) and average (5.5), sorts the array, and prints the ascending and descending orders. The output window shows the results: 'Total = 55', 'Average = 5', 'Maximum marks = 10', 'Minimum marks = 1', 'Ascending order: 1 2 3 4 5 6 7 8 9 10', and 'Descending order: 10 9 8 7 6 5 4 3 2 1'.

```

using System;
class Program
{
    static void Main()
    {
        int[] arr = new int[10];
        int i, sum = 0, average;
        Console.WriteLine("Enter the elements");
        for (i = 0; i < arr.Length; i++)
        {
            arr[i] = Convert.ToInt32(Console.ReadLine());
            sum = sum + arr[i];
        }
    }
}

```

Enter the elements
1
2
3
4
5
6
7
8
9
10
Total = 55
Average = 5
Maximum marks = 10
Minimum marks = 1
Ascending order: 1 2 3 4 5 6 7 8 9 10
Descending order: 10 9 8 7 6 5 4 3 2 1