

# Bahria University,

## Karachi Campus



### LAB EXPERIMENT NO.

8

### LIST OF TASKS

TASK NO	OBJECTIVE
1	Write a program, which creates an array of 20 elements of type integer and initializes each of the elements with a value equal to the index of the element multiplied by 5. Print the elements to the console.
2	Write a program, which reads two arrays from the console and checks whether they are equal (two arrays are equal when they are of equal length and all of their elements, which have the same index, are equal).
3	Make a program in C# in which take 5 numbers from user and then give sum and avg. of them. Using arrays

**Submitted On:**

**(Date: DD/MM/YY)**

## LAB 08

### TASK 1

#### INPUT

```
using System;

namespace Lab_8
{
    class Program
    {
        static void Main(string[] args)
        {
            int[] arr = new int[20];
            for (int i = 0; i < arr.Length; i++)
            {
                arr[i] = i * 5;
            }
            for (int j = 0; j < arr.Length; j++)
            {
                Console.Write(arr[j]+" ");
            }
            Console.ReadLine();
        }
    }
}
```

#### OUTPUT

C:\Users\Shumail Tassadaq\source\repos\Lab 8\bin\Debug\netcoreapp3.1\Lab 8.exe

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95

### TASK 2

#### INPUT

```
using System;


namespace Lab_8
{
    class Program
    {
        static void Main(string[] args)
        {
            int n1, n2;
            Console.Write("Enter the number of elements of array 1 : ");
            n1 = int.Parse(Console.ReadLine());
            Console.Write("Enter the number of elements of array 2 : ");
            n2 = int.Parse(Console.ReadLine());
            if (n1 == n2)
            {
                int[] arr1 = new int[n1];
                Console.WriteLine("\nEnter the elements of array 1\n");
                for (int i = 0; i < n1; i++)
                {
                    Console.Write("Enter the value {0} : ", i + 1);
                    arr1[i] = int.Parse(Console.ReadLine());
                }
            }
        }
    }
}
```

```
    }

    int[] arr2 = new int[n2];
    Console.WriteLine("\nEnter the elements of array 2\n");
    for (int j = 0; j < n2; j++)
    {
        Console.Write("Enter the value {0} : ", j + 1);
        arr2[j] = int.Parse(Console.ReadLine());
    }

    for (int i = 0; i < n1; i++)
    {
        arr1[i] = arr2[i];
        if (arr1[i] == arr2[i])
        {
            Console.WriteLine("The Arrays are equal");
            break;
        }
        else
        {
            Console.WriteLine("The lenght of the array is equal but values
inside the array are unequal hence the array is not equal");
        }
    }
}
else
{
    Console.WriteLine("The Arrays are not equal");
}
}
}
```

## OUTPUT

 Microsoft Visual Studio Debug Console

```
Enter the number of elements of array 1 : 4
Enter the number of elements of array 2 : 4

Enter the elements of array 1

Enter the value 1 : 1
Enter the value 2 : 2
Enter the value 3 : 3
Enter the value 4 : 4

Enter the elements of array 2

Enter the value 1 : 1
Enter the value 2 : 2
Enter the value 3 : 3
Enter the value 4 : 4
The Arrays are equal
```


### TASK 3

#### INPUT

```
using System;

namespace Lab_8
{
    class Program
    {
        static void Main(string[] args)
        {
            double sum=0;
            double avg;
            double[] arr = new double[5];
            Console.WriteLine("Enter the five numbers");
            for (int i = 0; i < arr.Length; i++)
            {
                arr[i] = double.Parse(Console.ReadLine());
                sum = sum+ arr[i];
            }
            Console.WriteLine("Sum of the arrays = " + sum);
            avg = sum / 5;
            Console.WriteLine("Average of the arrays = "+ avg);
        }
    }
}
```

#### OUTPUT

 Microsoft Visual Studio Debug Console

```
Enter the five numbers
23
4
7
9
5
Sum of the arrays = 48
Average of the arrays = 9.6
```