LAB SHEET 4 (ARRAYS)

1. **Class Teacher wants to calculate the sum and average of her students marks. Write a code to solve this.**

```
namespace myfirstproject
{
    internal class sumofnumbersarray
    {
        static void Main()
        {
            Console.Write("How many  student's marks do you want to store: ");
            int a = Convert.ToInt32(Console.ReadLine());
            int[] arr1 = new int[a];
            int sum = 0;
            float average = 0;
            for (int i = 0; i < arr1.Length; i++)
            {
                Console.Write("enter " + i + " Mark: ");
                arr1[i] = Convert.ToInt32(Console.ReadLine());
                sum = sum + arr1[i];
            }
            average = sum / arr1.Length;

            Console.WriteLine("Displaying array");
            foreach (int j in arr1)
                Console.WriteLine(j);

            Console.WriteLine(" sum is " + sum);
            Console.WriteLine(" average  is " + average);
        }
    }
}
```

```
How many marks do you want to store 8
enter 0 number 123
enter 1 number 34
enter 2 number 56
enter 3 number 78
enter 4 number 90
enter 5 number 234
enter 6 number  5678
enter 7 number 7890

Displaying array
123
34
56
78
90
234
5678
7890
 sum is 14183
 average  is 1772

C:\C#Programming\myfirstproject\bin\Debug\net6.0\myfirstproject.exe (process 5180) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

Assessment 4 (a):

Write a C# code to search the number in a given array and its number of occurrence also.

int[] arr = **new int**[10]{ 10, 20, 30, 40, 50, 10, 20, 10, 20, 30 };

or

int[] arr = { 10, 20, 30, 40, 50, 10, 20, 10, 20, 30 };

Input: Enter the element to search in the Array : 10
Output: Total occurrence of value 10 is : 3

2. Write a C# code to display two-dimensional array.

```csharp
namespace myfirstproject
{
    internal class _2dArray
    {
        static void Main()
        {
            int t;
            int[,] obj = new int[3, 4];
            int count = 1;
            for (t = 0; t < 3; t++)
            {
                for (int j = 0; j < 4; j++)
                {
                    obj[t, j] = count;
                    Console.Write(obj[t, j] + "  ");
                    count = count + 1;
                }
                Console.WriteLine();
            }
        }
    }
}
```

```
Microsoft Visual Studio Debug Console                              —    □    ✕
1  2  3  4
5  6  7  8
9  10  11  12

C:\Users\santh\source\repos\ConsoleApp13\ConsoleApp13\bin\Debug\net6.0\ConsoleApp13.exe (process 18208) exited with code
 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the conso
le when debugging stops.
Press any key to close this window . . .
```

Assessment 4b

Write a C# code to display two dimensional array showing only even
number like this :   2   4   6   8   10

                              12 14 16 18 20