

Lab 03

Methods and Arrays

1- Write a method that takes a string and prints the alphabetical order of each character

```
class Program
{
    static void Main(string[] args)
    {
        Console.WriteLine("Enter a word");
        string word = Console.ReadLine();
        printOrder(word);
    }

    static void printOrder(string s)
    {
        string lowerWord = s.ToLower();
        foreach (char ch in lowerWord)
        {
            Console.Write((int)(ch - 'a'));
        }
    }
}
```

2- Write a method that takes a variable number of values and calculates the average

```
class Program
{
    static void Main(string[] args)
    {
        double avg1 = average(5, 8, 12, 10, 50, 123.5, 44);
        double avg2 = average(2, 4.5, 9);
        double avg3 = average(10, 11);
        double avg4 = average();

        Console.WriteLine("avg1 is {0} \navg2 is {1} \navg3 is {2} \navg4 is {3}", avg1, avg2, avg3, avg4);
    }

    static double average(params double[] numbers)
    {
        double sum = 0;
        double avg = 0;
        foreach (double number in numbers)
        {
            sum += number;
        }
        avg = sum / numbers.Length;
        return avg;
    }
}
```

3- Write a method that calculates the maximum of two integers, then use it to calculate the maximum of three integers

```
class Program
{
    static void Main(string[] args)
    {
        Console.WriteLine("Enter the first number");
        int a = int.Parse(Console.ReadLine());
        Console.WriteLine("Enter the second number");
        int b = int.Parse(Console.ReadLine());
        Console.WriteLine("Enter the third number");
        int c = int.Parse(Console.ReadLine());

        Console.WriteLine("The largest of three number is : {0}",
myMax(myMax(a, b), c));
    }

    static int myMax(int x, int y)
    {
        return x > y ? x : y;
    }
}
```