

EXERCISE 02 – METHODS WITH PARAMETERS

IMPORTANT: Before submission, make a copy of your **'Program.cs'** file for each question and then rename each file to the following:

File Names:

- *last_name_first name_U5_E02_1.cs*
- *last_name_first name_U5_E02_2.cs*
- *last_name_first name_U5_E02_3.cs*

Note: Along with last name and first name, make sure the end of the filename (i.e., before the .cs) has the **unit number**, **exercise number**, and **question number**. For example:

smith_john_U1_E03_2.cs

1. Implement the following **method definition**:

```
void CalculateArea(double length, double width)
```

The above method should:

- Calculate the area based on the parameters
- Output the area with an appropriate message

Ask the user for a **length** and **width**, then **call** the above method using these values as arguments.

2. Implement the following **method definition**:

```
void CheckNumberGuess(int guess)
```

The above method should:

- Generate a random number between 1 and 10
- Check if the parameter 'guess' equals the generated number
- Output a message indicating if the guess was correct or not

Create a while-loop in which you will repeatedly ask the user for a **guess** between 1 and 10, then **call** the above method using this value as the argument. When the user enters '-1', break out of your while-loop to end the program.

3. Implement the following **method definition**:

```
void GetStudentInfo();
```

The above method should:

Ask the user for their name

Ask the user for 4 marks

Implement the following **method definition**:

```
void OutputTable(string name, double mark1, double mark2, double mark3, double mark4)
```

The above method should generate output that looks like the following:

Name: John Doe

Mark 1	Mark 2	Mark 3	Mark 4
87	75	93	81

Implement the following **method definition**:

```
void CalculateAverage(double mark1, double mark2, double mark3, double mark4)
```

The above method should:

- Calculate the average of the 4 marks
- Output the average with an appropriate message

Method calls:

- Initially, your program should call the **GetStudentInfo()** method
- The **GetStudentInfo()** method should call the **OutputTable()** method
- The **OutputTable ()** should call the **CalculateAverage()** method