**CPSC1012 In-Class Exercise #8 – Methods – Creating and Calling Overloaded Methods**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student Name: |  | Student Mark: |  | /5 |

**INSTRUCTIONS**

Complete the requirements of this assignment on your own. When you have finished, write your name on the board to get your instructor to mark your assignment. You are encouraged to create a flowchart; without a flowchart your instructor may not provide any assistance.

**Step 1:** Create the method specified below:

static int GetNumber(string message)

**Input parameters:**

message: message to be displayed for the prompt

**Returns:**

A valid integer from 1 to 10 inclusive. Strings will crash the program.

**Step 2:** Create the method specified below:

static int GetCharacter(string message)

**Input parameters:**

message: message to be displayed for the prompt

**Returns:**

Any single character. Strings will crash the program.

**Step 3:** Create the method specified below:

static void DrawTriangle(int rows)

**Input parameters:**

rows: number of rows of the triangle

**Output:**

Draws a triangle with the default character of a **\***

**Step 4:** Create the method specified below**:**

static void DrawTriangle(int rows, char drawChar)

**Input parameters:**

rows: number of rows of the triangle

drawChar: the character used to fill the triangle with

**Output:**

Draws a triangle with the drawChar

**Step 5:** In the Main() method, write the code that will do the following:

1. Prompt and read the number of rows of the triangle by calling the GetNumber() method, (validation required).
2. Prompt and read in the draw character for the triangle by calling the GetCharacter( ) method, (no validation required).
3. Call the DrawTriangle(int) method to display a triangle filled with \*’s.
4. Call the DrawTriangle(int, char) method to display a triangle filled with the user’s character.

**Step 6:** Test your program using the following test plan.

Table 1: Test Plan for Exercise #8

|  |  |  |  |
| --- | --- | --- | --- |
| ***Test case*** | ***Test Data*** | ***Expected result*** | ***Checked*** |
| Invalid number of rows | 11  0 |  |  |
| Rows = 3  Draw with & | 3  & |  |  |
| Rows = 8  Draw with ‘A’ | 8  A |  |  |