**Montgomery College**

**CMSC 203**

**Assignment 1 Design**

1) Write the pseudo code for Assignment 1 based on the Assignment 1 Description given to you. Refer to the [**Pseudocode Guideline**](#PSGdline)on how to write Pseudocode.

2)Complete the following test table. At this point you only need to complete the **Input** and **Expected** **Output** columns. Later when the implementation is complete, you will complete the **Actual Input** and **Actual Output** columns and compare them to see if the tests passed or not.

Use the given tests table and data as an example. Record your data for input and output in the following table. **Make sure your tests cover all the possible scenarios.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case #** | **Input** | **Actual Input** | **Expected Output** | **Actual Output** | **Did the test pass?** |
| 1 | Temp:  30  Wind chill:  20 | Temp:  30  Wind chill:  20 | 17.361783756466327 | Wind chill temperature: 17.361783756466327 degrees Fahrenheit | y |
| 2 | Temp:  45  Wind chill:  20 | Temp:  45  Wind chill:  20 | Invalid Input | Invalid Input | y |
| 3 | Temp: 5  Wind chill: 0 | Temp: 5  Wind chill: 0 | Invalid windspeed | Invalid windspeed | y |
| 4 | Temp: 17  Wind chill: 52 | Temp: 17  Wind chill: 52 | -7.291272867 | Wind chill temperature: -7.291272867224368 degrees Fahrenheit | y |

**Pseudocode**

Declare a final double variable named CONS1 to hold formula constants

Declare a final double variable named CONS2

Declare a final double variable named CONS3

Declare a final double variable named CONS4

Declare a final double variable named CONS5

Declare double variable tempIn

Declare double variable windspdIn

Declare double variable finTemp

Declare a scanner named input

Print out prompt asking for input for temperature

Set tempIn to user input using scanner

If tempIn is not between -45 and 40, print out “invalid input”

Else, print out prompt asking for windspeed

Set windspdIn to user input using scanner

If windspdIn is not between 5 and 60, print out “invalid input”

Else, set finTemp to calculated windchill using inputs and constants

Print out the wind chill temperature

Print out programmer info (Alejandro Lazo)