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**Class: CMSC203- 32715**

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**Date: 02/05/2020**

**Assignment: #1**

**Description:**

Develop a Java application that prompts for and reads two double numeric amounts that represent the Fahrenheit temperature and the wind speed. The temperature must be between -45 and 40 inclusively. The wind speed must be between 5 and 60 inclusively. Use these two amounts in the formula below to calculate the wind chill temperature in degrees Fahrenheit.

Here is how you calculate the New Wind Chill Index:

Wind Chill (oF) = 35.74 + 0.6215T - 35.75(V0.16) + 0.4275T(V0.16), where

V is the Wind Speed in MPH, and

T is the temperature in degrees F.

**Pseudocode:**

* Display Header of Application
* Ask user to enter temperature
* Ask user to enter wind speed
* Calculate the Wind Chill temperature
* Display the Wind Chill temperature
* Display Programmer Name

**Test Plan:**

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| --- | --- | --- | --- | --- | --- |
| **Test Case#** | **Input** | **Actual Input** | **Expected Output** | **Actual Output** | **Pass/Fail** |
| **1** | T= 30 V= 20 | T= 30 V= 20 | WindChill (0F) = 17.361784 | WindChill (0F) = 17.361783756466327 | **PASS** |
| **2** | T= -10 V = 4 | T= -10 V = 4 | WindChill (0F) = -20.439430 | WindChill (0F) =  -20.439430219787013 | **PASS** |
| **3** | T= 40 V= 60 | T= 40 V= 60 | WindChill (0F) = 24.692676 | WindChill (0F) = 24.692676351298985 | **PASS** |
| **4** | T= 0 V = 0 | T= 0 V = 0 | WindChill (0F) = 35.74 | WindChill (0F) = 35.74 | **PASS** |