**Montgomery College**

**CMSC 203**

**Assignment 1 Design**

**Wind Chill Temperature test table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 | 17.361783756466327 | Yes |
| 2 | Temp: -15.5  Wind chill: 35.3 | Temp: -15.5  Wind chill: 35.3 | -48.842359110042835 | -48.842359110042835 | Yes |
| 3 | Temp: -9.3  Wind chill: 22.8 | Temp: -9.3  Wind chill: 22.8 | -35.55509110244696 | -35.55509110244696 | Yes |

**Pseudocode**

Declare a double variable temperature

Declare a double variable windSpeed

Declare a double variable windChill

Declare 4 constant double variable for formula:

c1 = 35.74, c2 = 0.6215, c3 = 35.75, c4 = 0.4275

Scan temperature(F) from user and save into tempF

Scan wind speed (MPH) from user and save into windSpeed

windChill = c1 + c2 \* temperature – c3 \* (windSpeed)0.16 + c4 \* temperature\* (windSpeed)0.16

Print windChill