

Test Case #	Input	Actual Input	Expected Output	Actual Output	Pass/Fail
1	Temp: 30 Wind: 20	Temp: 30 Wind: 20	17.361783756466327	17.361783756466327	Pass
2	Temp: -15.5 Wind: 35.3	Temp: -15.5 Wind: 35.3	-48.842359110042835	-48.842359110042835	Pass
3	Temp: -9.3 Wind: 22.8	Temp: -9.3 Wind: 22.8	-35.55509110244696	-35.55509110244696	Pass
4	Temp: -45 Wind: 60	Temp: -45 Wind: 60	-96.09634493372375 <i>should be</i> -98.09634499372375	-98.09634499372375	Pass
5	Temp: 263 Wind: 97	Temp: 263 Wind: 97	358.6280589657684 <i>read note</i>	358.6280589657684	Pass
6	Temp: -200 Wind: 0	Temp: -200 Wind: 0	-88.56 <i>read note</i>	-88.56	Pass
7	Temp: -2 Wind: 7.333	Temp: -2 Wind: 7.333	-15.851377617821033	-15.851377617821033	Pass

Note: while test case 5 and 6 are not valid temp or wind values, there is no input validation. Invalid values should still be accepted by the program.

Pseudocode

Declare double CONSTANT_1 as 35.74
 Declare double CONSTANT_2 as 0.6215
 Declare double CONSTANT_3 as 35.75
 Declare double CONSTANT_4 as 0.16
 Declare double CONSTANT_5 as 0.4275

Declare double variable outsideTemp
 Declare double variable windSpeed
 Declare double variable windChill

Create scanner object

Print introduction to user

Print question asking user for temperature in Fahrenheit within the specified parameters
 Ask for input from console and store in outsideTemp

Print question asking user for wind speed in mph within the specified parameters
 Ask for input from console and store in windSpeed

Declare windChill1 and initialize with $\text{CONSTANT_2} * \text{outsideTemp}$

Declare windChill2 and initialize with $\text{CONSTANT_3} * \text{windSpeed}^{\text{CONSTANT_4}}$

Declare windChill3 and initialize with $\text{CONSTANT_5} * \text{outsideTemp} * \text{windSpeed}^{\text{CONSTANT_4}}$

$\text{windChill} = \text{CONSTANT_1} + \text{windChill1} - \text{windChill2} + \text{windChill3}$

Print windChill value

Print programmer name