4 – WIND CHILL

When air moves across exposed skin, humans perceive the temperature to be colder than the measured air temperature. There is a formula to quantify that perception which is frequently being updated to ensure that it is as accurate as possible.

For each of the following air temperature and wind speed measurements, your program will perform the appropriate calculations and display the corresponding wind chill temperature index:

- 10.0 degrees and 15 MPH
- 0.0 degrees and 25 MPH
- -10.0 degrees and 35 MPH

After calculating and displaying the wind chill temperature indices for the three pairs of measurements given above, your program will then:

- prompt the user to enter an air temperature measurement and accept a floating point value representing that measurement
- prompt the user to enter a wind speed measurement and accept a floating point value representing that measurement
- perform the appropriate calculations
- display the wind chill temperature index for those user-selected values

The following Python statement can be used to calculate the Wind Chill Temperature Index, assuming that variables "air_temp" and "air_speed" have been assigned values:

$35.74 + 0.6215 * air\_temp - 35.75 * air\_speed**0.16 + 0.4275 * air\_temp * air\_speed**0.16$

```
### ECO CS 18 ##
### Project 1 ##

Temperature of 10 and speed of 15 gives windchill of:  -6.5895344209562525
Temperature of 0 and speed of 25 gives windchill of:  -24.093780999553864
Temperature of -10 and speed of 35 gives windchill of:  -41.16894662953316
Temperature: 3.5
Speed: 18
Windchill:  -16.47884113003356
```