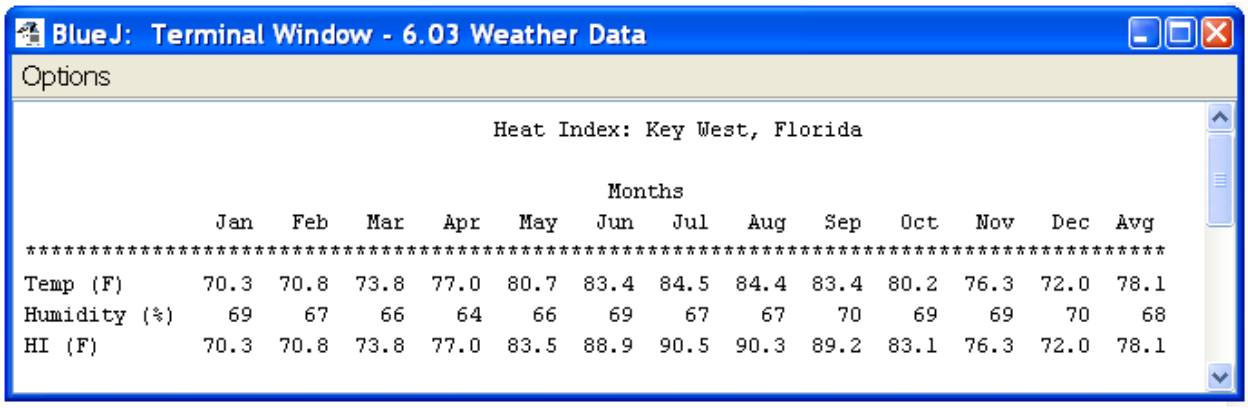
# 6.03 Assignment Instructions

**Instructions:** Write a program to calculate the monthly Heat Index for a specific city.


1. Create a new project called 6.03 Weather Data in the Mod06 Assignments folder.
2. Create a class called HeatIndex in the newly created folder.
3. Be sure you have downloaded the KeyWestTemp.txt and the KeyWestHumid.txt files to the project folder.
4. Break the program into functional units so that you can use separate for loops and arrays to handle specific tasks.
5. Your program should read in the data from the two text files.
6. Be sure to use the for-each loop when it is appropriate.
7. Calculate the monthly Heat Index for Key West, Florida.
8. Notice from the table shown in the 6.03 Virtual Lecture Notes that if the temperature and humidity are below certain levels, the actual temperature and the apparent temperature (i.e. the Heat Index) are identical. For example, in the expected output shown below, notice that the Heat Index is only calculated for the months of May – October.
9. Use the Formatting Grid you downloaded in the last lesson to plan your user-friendly output.
10. Print the results in a user-friendly format (i.e. use **`printf()`**) with columns for the Month, Temperature, Relative Humidity, and the Heat Index.
11. Write the Heat Index data to a file. Include this file when you submit your program.
12. Writing the lengthy Heat Index formula can be very error prone, so watch out for the Order of Operations.

**Expected Output:** When your program runs correctly, your output should resemble the following.




.