Meteorology 2270 – Homework #8
Due: 10/30/2024

Modify Homework #7 so that it uses arrays.

Once again, the program will ask the user for the name of the data file, and use an **unformatted** read statement to read the data file. Your program should read one line at a time until the end of the file is reached. Once the end of the file is reached, your program should calculate and output the following:

1. Average and variability (standard deviation) of temperature,
2. Maximum daily temperature,
3. Minimum daily temperature,
4. Average and variability (standard deviation) of wind speed,
5. Average and variability (standard deviation) of pressure in millibars,
6. Daily accumulated precipitation.

Your program should print this data, nicely formatted, to the screen, for the user to view.

Lastly, now that you are becoming experienced programmers, I will be looking for your program to be as efficient as possible. While this applies generally to all your assignments, I will be particularly looking for efficiency in your loop structure in this program.

Hand in your assignment by emailing it as an attachment to mteor2270@iastate.edu and by submitting a hard copy version of the program in class.