

Meteorology 2270 – Homework #2

Due: 09/09/2024

Problem: You require an algorithm that will prompt the user for a temperature and dew point in degrees Fahrenheit. From those temperatures, calculate the dew point depression, the vapor pressure (e), the saturation vapor pressure (e_s), the relative humidity ($RH = e/e_s$), and the heat index. If the temperature is at least 100 degrees F or the heat index is at least 105 degrees F, have the program print “Potential Heat Advisory.” Output to the display will be the temperature, dew point, relative humidity, and the advisory message, if necessary. Note: you will need to convert the temperature and dew point to Kelvin degrees to find the vapor pressure and saturation vapor pressure. Make sure to account for this in your solution.

Assignment: Outline a solution to this problem by building a defining diagram and flow chart. We will do a desk check later.