For Part I, you must include a written description of three observable trends based on the data.

1. As we can see from the regression plots, as we approach the equator, temperatures rise, and conversely, as we move away from the equator, temperatures fall. This intuitively makes sense, given what we have all heard about the heat of the countries that lie on the equator and the frigid weather conditions of the areas around the poles.
2. Also noteworthy from our regression results is the fact that there is a weak relationship (or almost none) between the latitude and cloudiness, Wind Speed or Humidity. There are clearly other things that explain the variance in these data that are more complex and rely on more than simply the city’s latitude. Proximity to mountains and the ocean, the proximity of farmlands, and a country’s environmental/pollution regulations might all play into the variance within cloudiness, Wind Speed or Humidity. A multivariate regression with some of the factors mentioned above (and others) would likely better explain the variance in cloudiness, Wind Speed or Humidity.
3. Given that these observations are being gathered in August, we can assume that the fact that there is some interference in our results due to the fact that the Northern Hemisphere is experiencing summer and the Southern Hemisphere is experiencing winter. In order to control for the seasonal bias, we study designers could plan to gather data again approximately half a year from today in order to get the inverse of today’s results, when it will be winter int the North and summer in the South. Then comparing apples to apples, today’s Northern summer results with the Southern summer results in a half year. The same goes for comparing Southern winter results of today with the northern winter results from a half year from now.