Analysis

- Observed Trend 1 - The latitude vs. temperature plot shows that the highest temperatures are indeed closest to the equator. Currently, the southern hemisphere has higher temperatures than the northern hemisphere. Almost no southern hemisphere temperatures are below 50 degrees farenheit.
- Observed Trend 2 - The latitude vs. humidity plot shows that humidity increases near the equator. Within 8 to 10 degrees latitude from the equator, there are no city with humidity less than 60%.
- Observed Trend 3 - I did not notice a strong relationship between latitude and cloudiness or wind speed. Instead, it appears that there may be some sort of bias in citipy or openweathermapi towards cities in the northern hemisphere. Bias may not be the correct word, but if the random number generator picked completely random numbers, more southern hemisphere cities were filtered out by citipy or openweathermapi. This could be because there are fewer weathermapi registered southern hemisphere or because the registered cities are further from the random coordinates that were randomly selected and northern hemisphere cities were picked instead.

In [1]:
```
import matplotlib.pyplot as plt
import openweathermapy as ow
import pandas as pd
from citipy import citipy
from pprint import pprint
from random import random
import numpy as np
import requests
import datetime
from config import api_key
```

Generate Cities List