**Background**

In this assignment, I'll be creating a Python script to visualize the weather of 500+ cities across the world of varying distance from the equator. To accomplish this, I'll be utilizing a simple Python library, the OpenWeatherMap API, and a little common sense to create a representative model of weather across world cities.

My objective is to build a series of scatter plots to showcase the following relationships:

* Temperature (F) vs. Latitude
* Humidity (%) vs. Latitude
* Cloudiness (%) vs. Latitude
* Wind Speed (mph) vs. Latitude

**Approach**

Generate a minimum of 500 random longitude and latitudes, combine the 2 together to create a list of longitude/latitudes that can be used as input to CityPy.

CityPy will attempt to identify the closest city to the random longitude and latitudes.

Once I have the list of close city names, I will be invoking OpenWeatherMap API to collect the current weather (for the cities identified) and collect specific attributes to be used in subsequent analytics.

Data Assessments completed on provided data include:

* A scatter plot showing Temperature (F) versus Latitude of each city
* A scatter plot showing Humidity (%) versus Latitude of each city
* A scatter plot showing Cloudiness (%) versus Latitude of each city
* A scatter plot showing Wind Speed (mph) versus Latitude of each city

**Observations**

* Cities closer to the zero (0) latitude line encounters higher temperatures
* Humidity and Cloudiness to Latitude do not appear to have a direct correlation.
* Wind speed may have a small correlation to latitude with higher wind speed appearing in positive latitudes.