WEATHERPY

DATA ANALYSIS

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HOME ASSIGNMENT – 6

INTRODUCTION:

In this project, we try to come up with proof on Earth's weather conditions getting hotter as we approach the equator, we try to pick 600+ random cities across the world of varying distance from the equator a analyze weather conditions on each of the cities by making a series of successive API calls.

CONTENTS:

❖ GitHub/I Python Notebook file link:

- GitHub:

  https://github.com/skavya90/WeatherPy_06.git

- JupyterNotebook/IPython:

  https://github.com/skavya90/WeatherPy_06/blob/master/Weatherpy.ipynb

❖ Sources :

- OpenWeatherMap API -

  https://openweathermap.org/api

- Citipy : Used as a data source for capturing nearest cities with geo coordinates

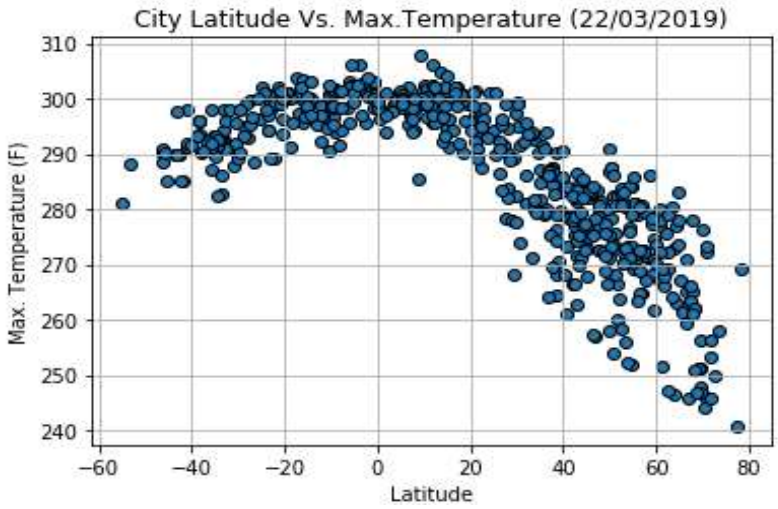
❖ Technical Requirements:

- Python
- Pandas
- Matplotlib
- Requests
- Datetime

❖ Observations/Conclusions

1. The plot below shows relation between temperatures and latitudes.

   - we could clearly notice that temperature is increasing as we move towards equator (0 degrees)

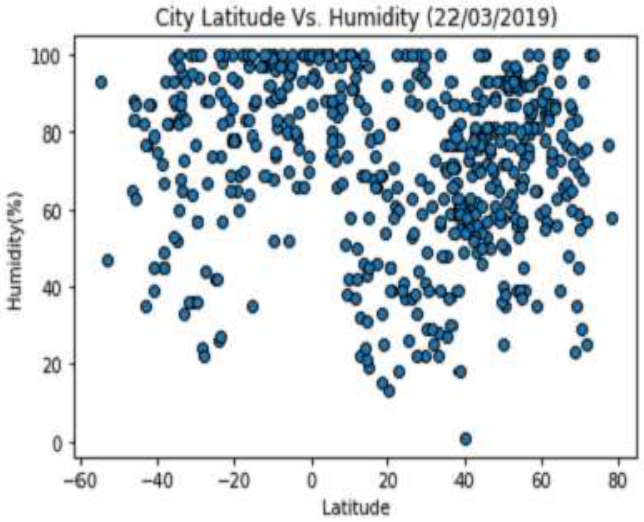


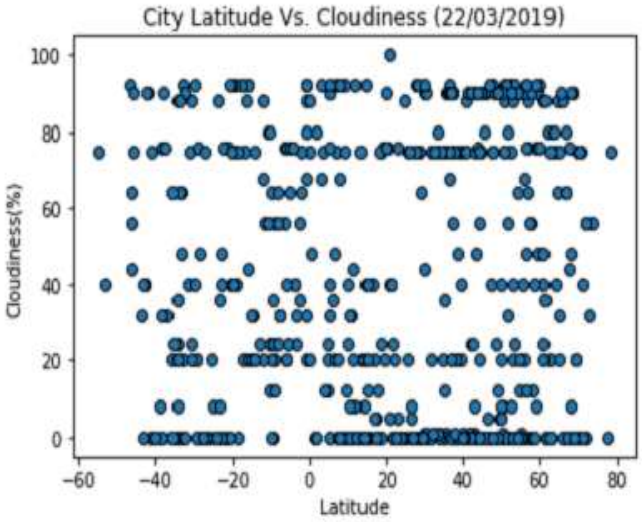
2. The plot below shows relation between

   a. latitudes and humidity

   b. latitudes and cloudiness

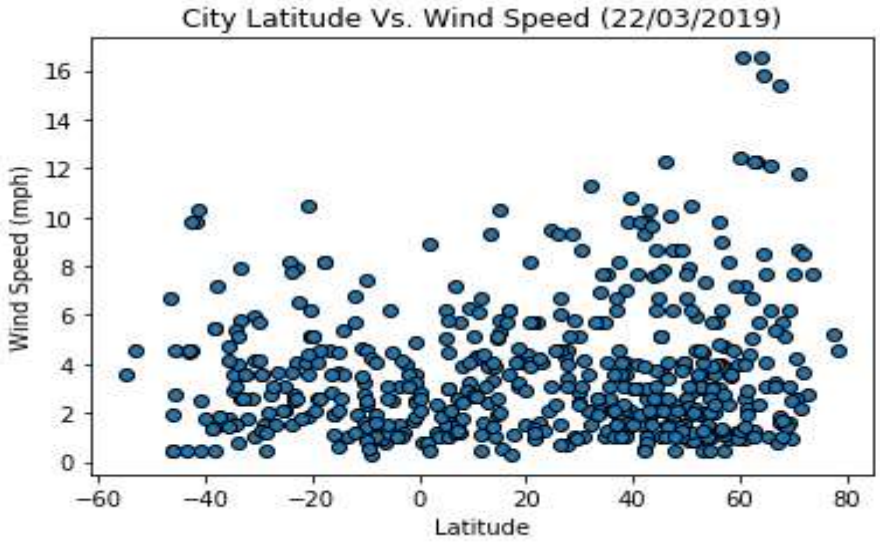
   ➢ We can observe that there is humidity is spread all across with no specific pattern between latitude and humidity.





3. The plot below shows relation between wind speed and latitudes.

- It is observed that wind speeds are consistently low near equator.


City Latitude Vs. Wind Speed (22/03/2019)
Wind Speed (mph)
Latitude
16
14
12
10
8
6
4
2
0
−60
−40
−20
0
20
40
60
80