HAWAII CLIMATE

ANALYSIS

KAVYA SHABNAVEES

HOME ASSIGNMENT – 10

INTRODUCTION:

In this document, we analyze previous year climate conditions of a place Honolulu, Hawaii in order to well plan a vacation based on the analysis.

CONTENTS:

- ❖ Github/iPython Notebook file link

- ❖ Technical Requirements

- ❖ Observations

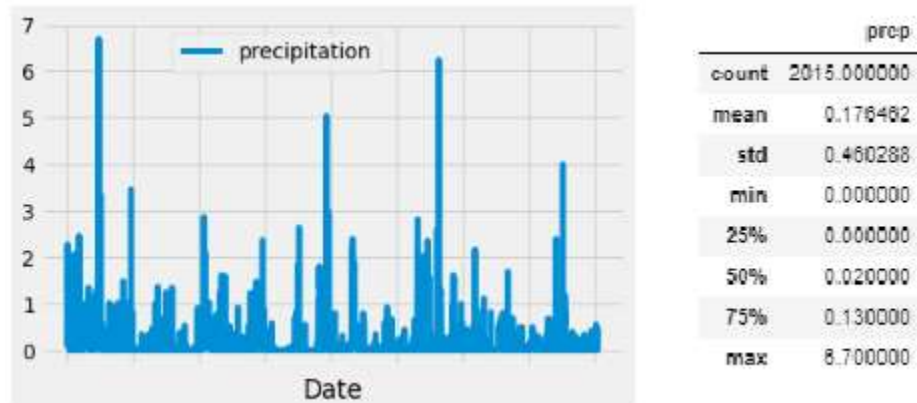- ❖ App routes screenshots

❖ <u>Github/iPython Notebook file link:</u>

- ➢ https://github.com/skavya90/AdvancedData.git

- ➢ https://github.com/skavya90/AdvancedData/blob/master/climate_starter.ipynb
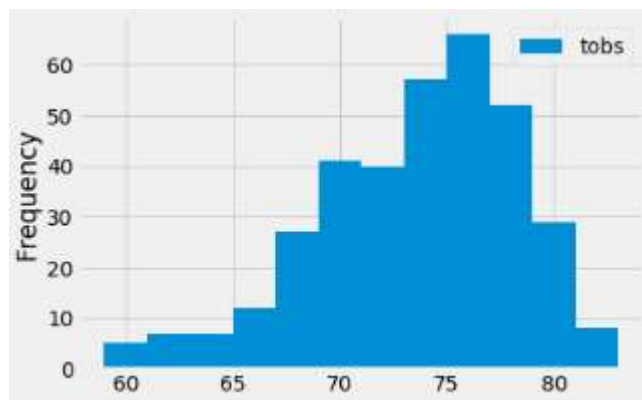
❖ <u>Technical Requirements:</u>

- ➢ Python
- ➢ Jupyter Notebook
- ➢ Pandas
- ➢ Matplotlib
- ➢ SQL
- ➢ SQL ALCHEMY
- ➢ FLASK
- ➢ Datetime
- ➢ API

❖ **Observations:**

- Hawaii had recorded a maximum precipitation of 6.7mm in last 365 days of the provided dataset(2016-2017).

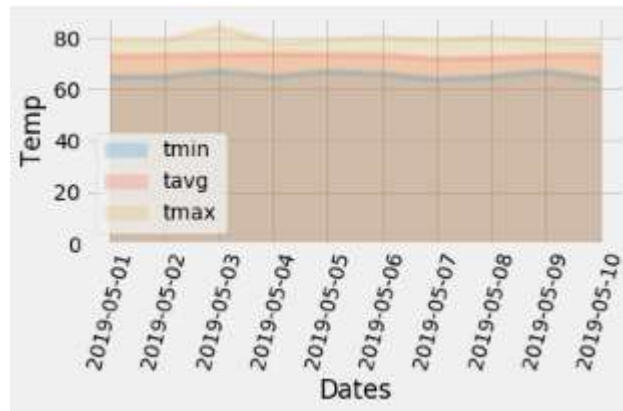|	prcp
count	2015.000000
mean	0.176462
std	0.460288
min	0.000000
25%	0.000000
50%	0.020000
75%	0.130000
max	6.700000

- Most active station with station ID "USC00519281" has marked 2272 temperature observations with minimum of 54 degrees, maximum of 85 degrees and average of (~)72 degrees.
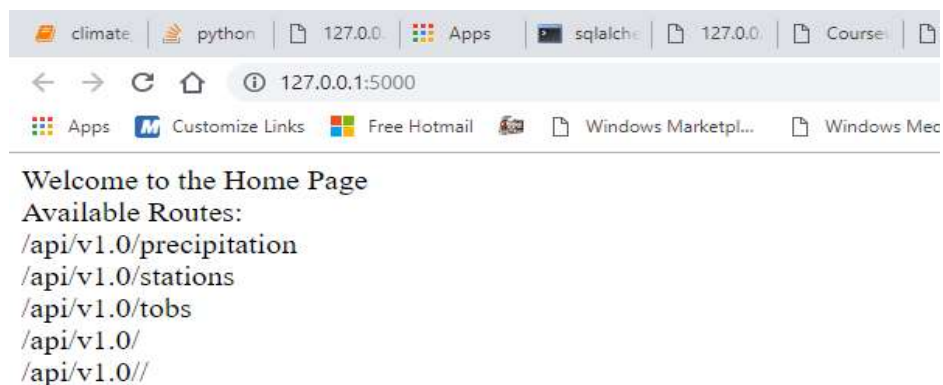


```
[min-54.0, max-85.0, avg-71.7]
```

- Below area plot shows the prediction analysis of daily temperatures (min, max, avg) for planned trip dates (i.e. 2019-05-01 to 2019-05-10).
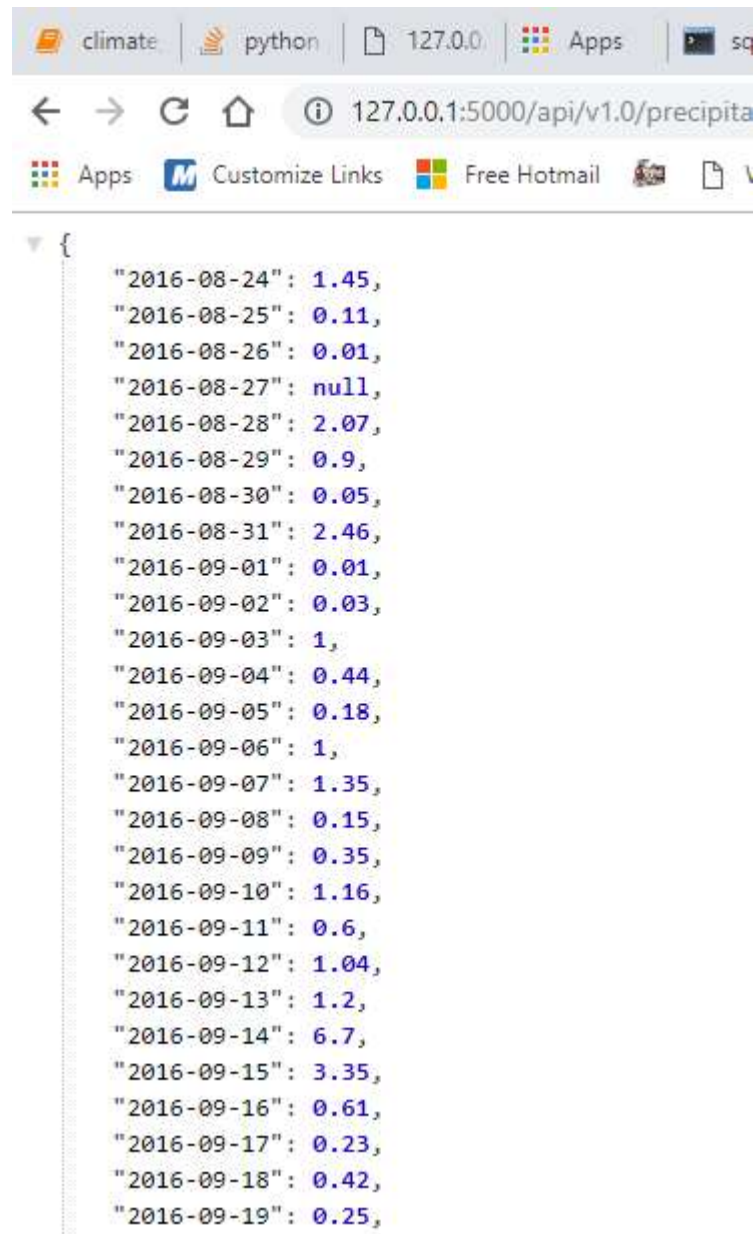

❖ **APP ROUTES – Screenshots:**
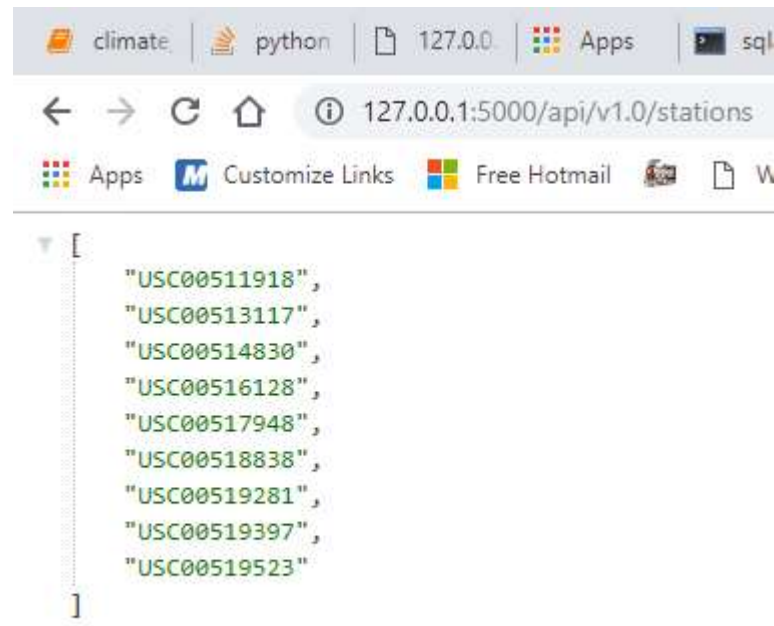
➢ (/) Homepage

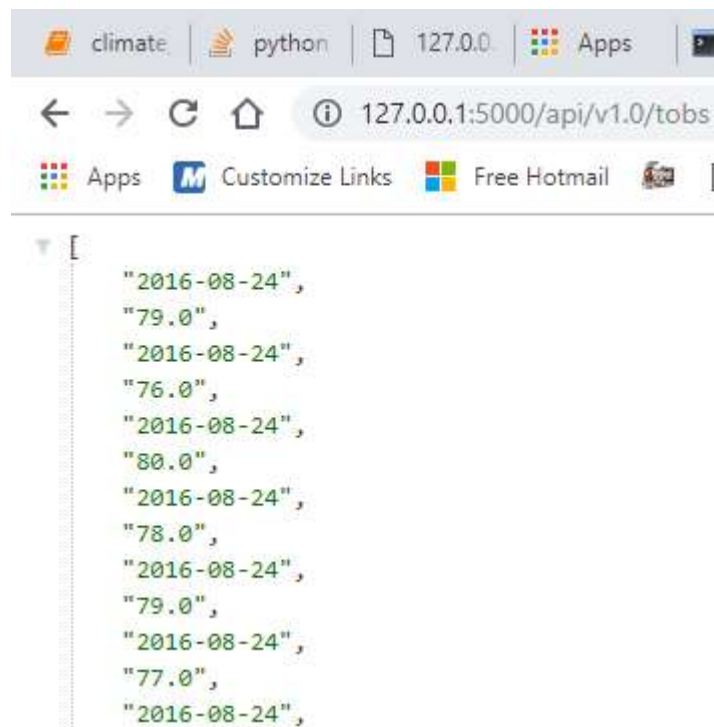➤ /api/v1.0/precipitation


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{
    "2016-08-24": 1.45,
    "2016-08-25": 0.11,
    "2016-08-26": 0.01,
    "2016-08-27": null,
    "2016-08-28": 2.07,
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    "2016-09-07": 1.35,
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    "2016-09-09": 0.35,
    "2016-09-10": 1.16,
    "2016-09-11": 0.6,
    "2016-09-12": 1.04,
    "2016-09-13": 1.2,
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    "2016-09-18": 0.42,
    "2016-09-19": 0.25,
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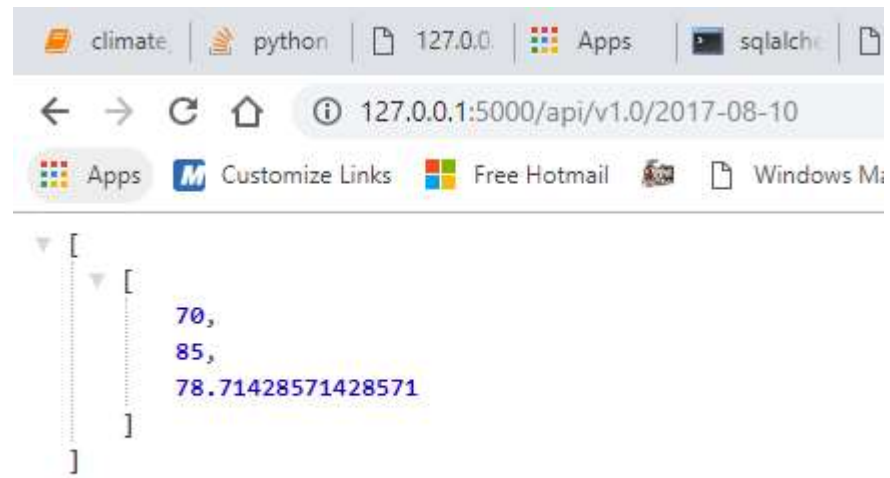
➢ /api/v1.0/stations

➢ /api/v1.0/tobs

➢ /api/v1.0/<start>

➢ /api/v1.0/<start>/<end>