

# Application Building

## Build Python Codes

### Python Code : Earthquake

```
import requests
import csv
from csv import DictReader
import pandas as pd
import numpy as np
from pandas import Series, DataFrame
import matplotlib.pyplot as plt
from matplotlib import rcParams
import seaborn as sb
# below lines are important when you get KeyError: 'PROJ_LIB'
import os
import conda
conda_file_dir = conda._file_
conda_dir = conda_file_dir.split('lib')[0]
proj_lib = os.path.join(os.path.join(conda_dir, 'share'), 'proj')
os.environ["PROJ_LIB"] = proj_lib
from mpl_toolkits.basemap import Basemap
```

### Output:

|   | time                     | latitude | longitude | depth | mag | magType | nst | gap | dmin  | rms  | ... | updated                  | place                                  | type       | horizontalError | dt |
|---|--------------------------|----------|-----------|-------|-----|---------|-----|-----|-------|------|-----|--------------------------|--|------------|-----------------|----|
| 0 | 2020-02-12T08:59:25.286Z | -24.1641 | -176.1798 | 92.01 | 5.2 | mb      | NaN | 90  | 5.296 | 1.32 | ... | 2020-02-12T09:15:18.040Z | South of the Fiji Islands              | earthquake | 10.7            |    |
| 1 | 2020-02-12T05:55:09.989Z | 0.7902   | 98.9466   | 81.22 | 4.5 | mb      | NaN | 98  | 1.462 | 0.85 | ... | 2020-02-12T06:20:16.040Z | 73km SSW of Padangsidempuan, Indonesia | earthquake | 7.3             |    |
| 2 | 2020-02-12T00:43:19.540Z | 52.6402  | 171.8590  | 10.00 | 4.9 | mb      | NaN | 146 | 1.369 | 0.67 | ... | 2020-02-12T01:02:31.040Z | 92km WSW of Attu Station, Alaska       | earthquake | 10.7            |    |
| 3 | 2020-02-11T21:42:43.476Z | -20.9359 | -70.7684  | 10.00 | 4.6 | mwr     | NaN | 139 | 0.899 | 1.25 | ... | 2020-02-12T01:06:24.938Z | 102km SW of Iquique, Chile             | earthquake | 4.0             |    |
| 4 | 2020-02-11T21:04:16.649Z | 4.5291   | 83.4764   | 10.00 | 4.7 | mb      | NaN | 101 | 3.878 | 1.03 | ... | 2020-02-12T08:44:21.249Z | North Indian Ocean                     | earthquake | 8.9             |    |

5 rows x 22 columns