PS2_1

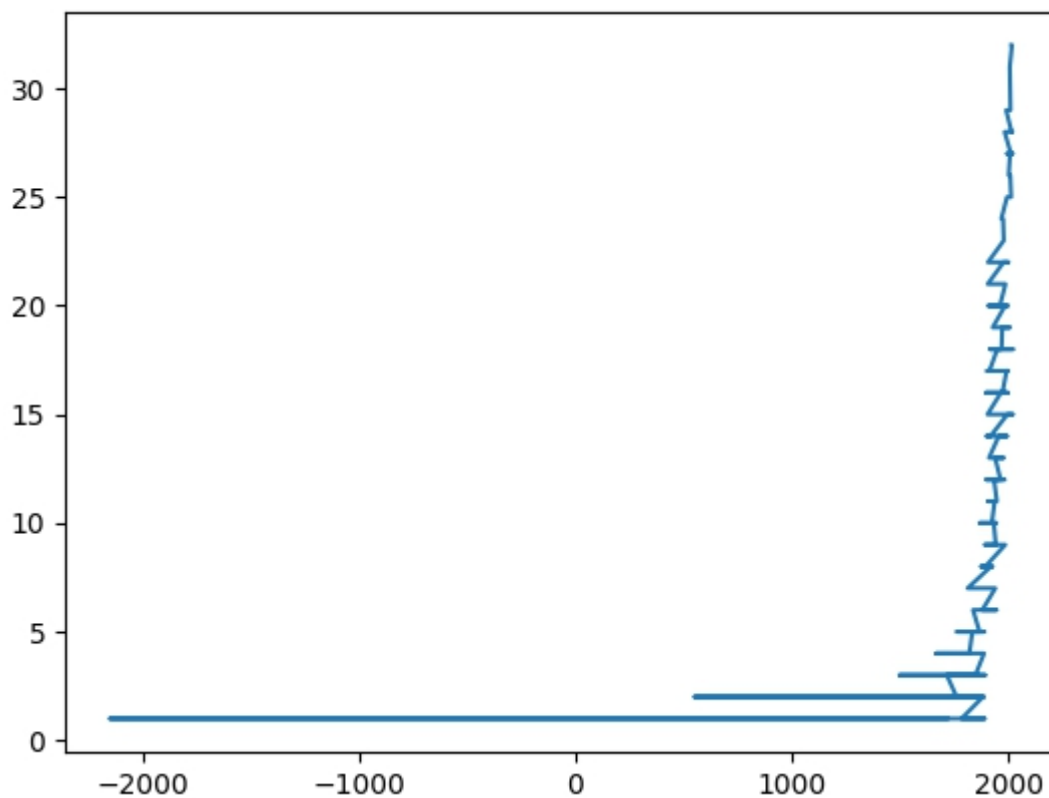**1.1 Ten countries along with the total number of deaths.**

```
Country
AFGHANISTAN                8185.0
ALBANIA                    2247.0
ALGERIA                   27126.0
ANTARCTICA                    0.0
ANTIGUA AND BARBUDA           4.0
ARGENTINA                   611.0
ARMENIA                       0.0
ATLANTIC OCEAN                0.0
AUSTRALIA                   103.0
AUSTRIA                       0.0
Name: Total Injuries, dtype: float64

Process finished with exit code 0
```

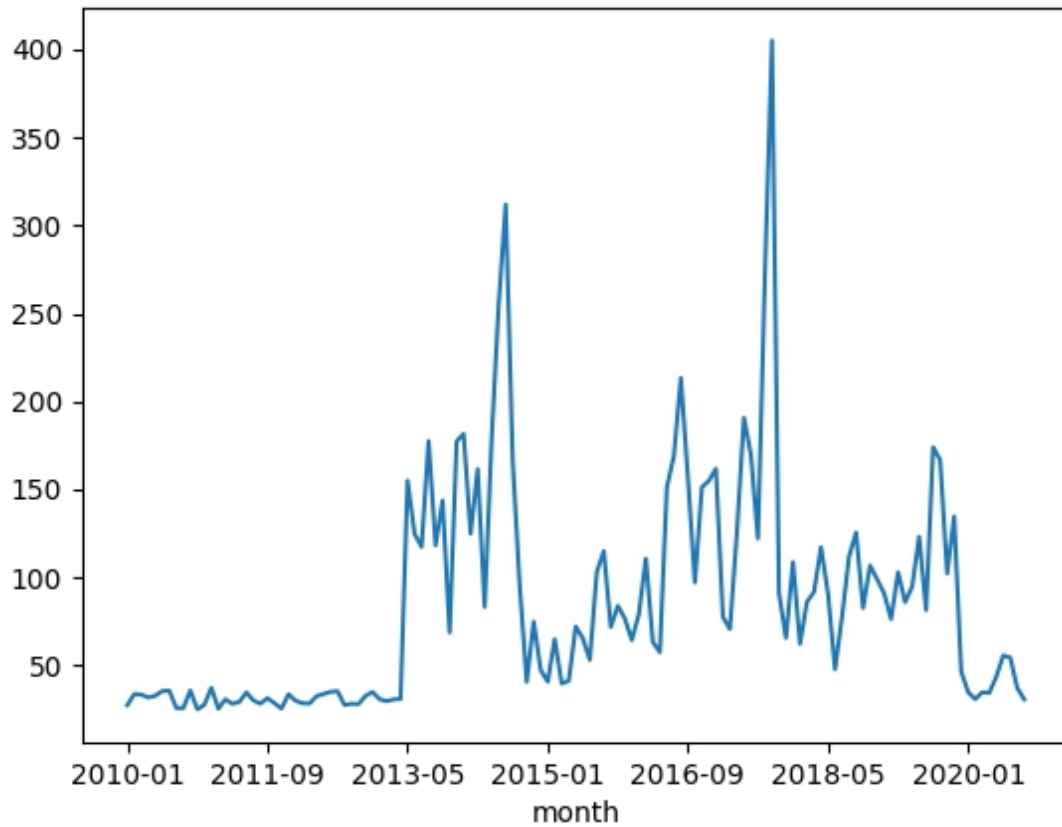**1.2 Time series of   total number of earthquakes with magnitude larger than 6.0.**

Trend:

The number of earthquakes with magnitude larger than 6 has increased in recent years, probably because of the increase in earthquake records in recent years.

1.3 The total number of earthquakes since 2150 B.C. in each country. The results shows in a descending order.

[('CHINA', 311), ('JAPAN', 222), ('ITALY', 218), ('IRAN', 213), ('TURKEY', 213), ('GREECE', 192), ('INDONESIA', 161), ('MEXICO', 142),

Process finished with exit code 0

PS2_2
Monthly averaged wind speed plot:

Trend:

The monthly average wind speed was relatively small from 2010 to 2012 and was the largest in 2017.
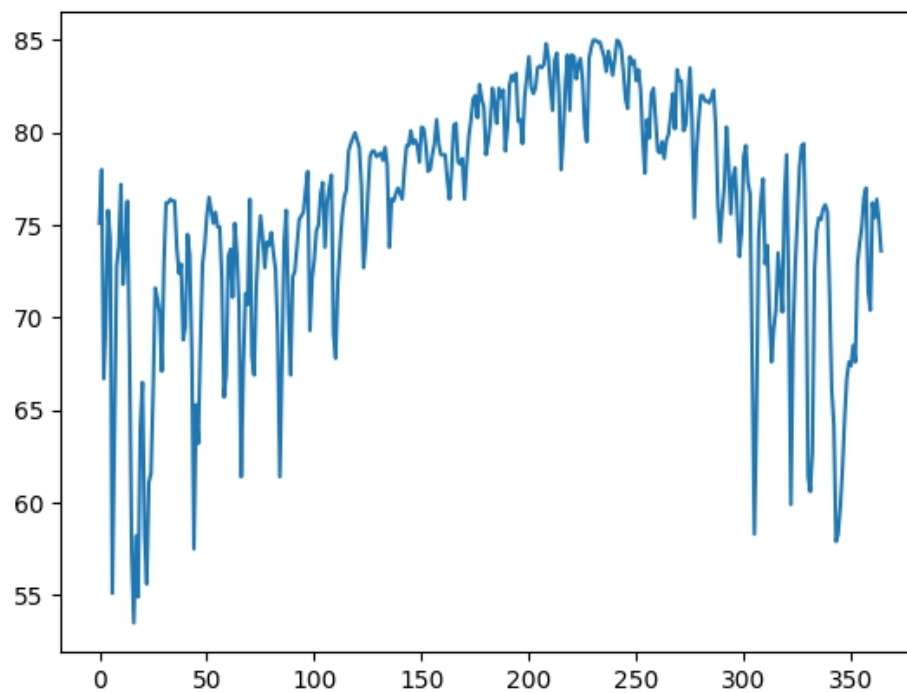
PS2_3
I downloaded the daily temperature dataset of a lake in California in 2014.
3.1 Clean possible data points with missing values or bad quality.

```
0        75.1
1        78.0
2        66.7
3        69.9
4        75.8
         ...
360      76.2
361      75.4
362      76.4
363      75.2
364      73.6
Name: temperature, Length: 365, dtype: float64

Process finished with exit code 0
```
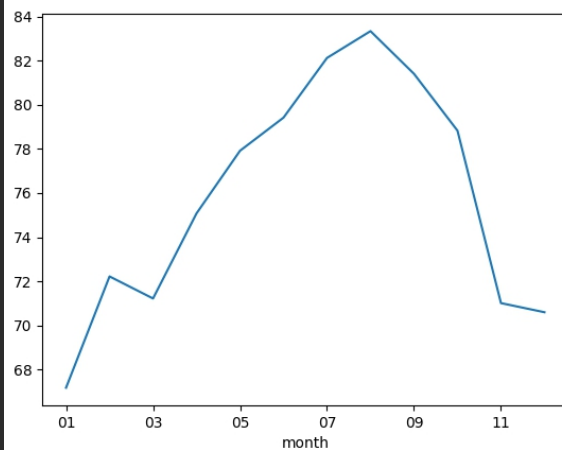
3.2 Time series of temperature.

3.3 Statistical checks of temperature: count, mean, maximum, minimum and monthly averaged temperature.

```
365
75.88246575342465
85.0
53.5
month
01    67.183871
02    72.225000
03    71.225806
04    75.080000
05    77.916129
06    79.416667
07    82.119355
08    83.332258
09    81.400000
10    78.825806
11    71.016667
12    70.603226
Name: temperature, dtype: float64

Process finished with exit code 0
```


Findings:

There are valid data every day in 2014.

The average temperature, maximum temperature, and minimum temperature of this lake are 75.8, 85, and 53.5 degrees Fahrenheit, respectively.

The summer temperature is higher and the highest is in August.