Unemployment Analysis Using Python

```
import pandas as pd
```

```
import matplotlib.pyplot as plt
```

```
df = pd.read_csv("/content/Unemployment in India.csv")
```

```
df.head()
```

	Region	Date	Frequency	Estimated Unemployment Rate (%)	Estimated Employed	Estimated Labour Participation Rate (%)	Area
0	Andhra Pradesh	31-05-2019	Monthly	3.65	11999139	43.24	Rural
1	Andhra Pradesh	30-06-2019	Monthly	3.05	11755881	42.05	Rural
2	Andhra Pradesh	31-07-2019	Monthly	3.75	12086707	43.50	Rural

```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 740 entries, 0 to 739
Data columns (total 7 columns):
 #   Column                                   Non-Null Count  Dtype
---  ------                                   --------------  -----
 0   Region                                   740 non-null    object
 1   Date                                     740 non-null    object
 2   Frequency                                740 non-null    object
 3   Estimated Unemployment Rate (%)          740 non-null    float64
 4    Estimated Employed                      740 non-null    int64
 5   Estimated Labour Participation Rate (%)  740 non-null    float64
 6   Area                                     740 non-null    object
dtypes: float64(2), int64(1), object(4)
memory usage: 40.6+ KB
```

```
df.describe()
```

	Estimated Unemployment Rate (%)	Estimated Employed	Estimated Labour Participation Rate (%)
count	740.000000	7.400000e+02	740.000000
mean	11.787946	7.204460e+06	42.630122
std	10.721298	8.087988e+06	8.111094
min	0.000000	4.942000e+04	13.330000
25%	4.657500	1.190404e+06	38.062500
50%	8.350000	4.744178e+06	41.160000
75%	15.887500	1.127549e+07	45.505000
max	76.740000	4.577751e+07	72.570000

```
df['Estimated Unemployment Rate (%)'].mean()
```

```
11.787945945945946
```

```
df.groupby('Region')['Estimated Unemployment Rate (%)'].mean()
```

```
Region
Andhra Pradesh      7.477143
Assam               6.428077
Bihar              18.918214
Chandigarh         15.991667
Chhattisgarh        9.240357
Delhi              16.495357
Goa                 9.274167
Gujarat             6.663929
Haryana            26.283214
Himachal Pradesh   18.540357
Jammu & Kashmir    16.188571
Jharkhand          20.585000
Karnataka           6.676071
Kerala             10.123929
Madhya Pradesh      7.406429
```
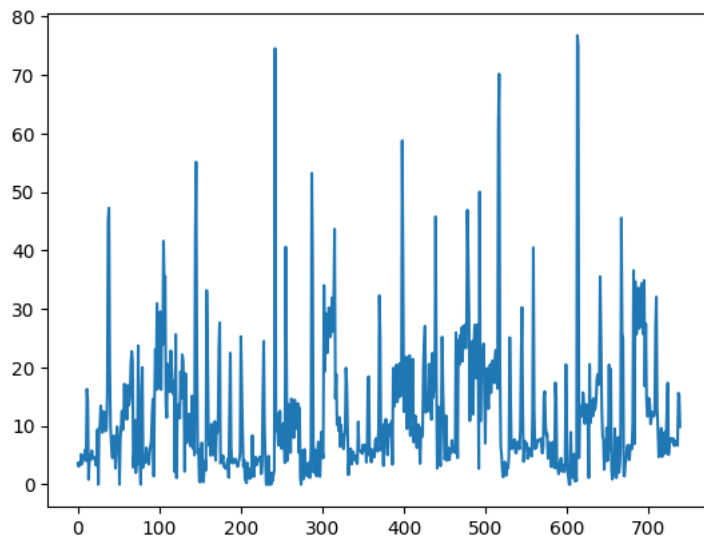
```
Maharashtra          7.557500
Meghalaya            4.798889
Odisha               5.657857
Puducherry          10.215000
Punjab              12.031071
Rajasthan           14.058214
Sikkim               7.249412
Tamil Nadu           9.284286
Telangana            7.737857
Tripura             28.350357
Uttar Pradesh       12.551429
Uttarakhand          6.582963
West Bengal          8.124643
Name: Estimated Unemployment Rate (%), dtype: float64
```

```python
df['Estimated Unemployment Rate (%)'].plot()
```

```
<Axes: >
```



```python
df.plot(x='Date', y='Estimated Unemployment Rate (%)', kind='line')
plt.show()
```