

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
import plotly.express as px
from google.colab import drive
drive.mount("/content/gdrive")
```

Mounted at /content/gdrive

```
data = pd.read_csv("/content/gdrive/MyDrive/OIBSIP/Unemployment in India.csv")
data = pd.read_csv("/content/gdrive/MyDrive/OIBSIP/Unemployment_Rate_upto_11_2020.csv")
print(data.head())
```

	Region	Date	Frequency	Estimated Unemployment Rate (%)	\
0	Andhra Pradesh	31-01-2020	M	5.48	
1	Andhra Pradesh	29-02-2020	M	5.83	
2	Andhra Pradesh	31-03-2020	M	5.79	
3	Andhra Pradesh	30-04-2020	M	20.51	
4	Andhra Pradesh	31-05-2020	M	17.43	

	Estimated Employed	Estimated Labour Participation Rate (%)	Region.1	\
0	16635535	41.02	South	
1	16545652	40.90	South	
2	15881197	39.18	South	
3	11336911	33.10	South	
4	12988845	36.46	South	

	longitude	latitude
0	15.9129	79.74
1	15.9129	79.74
2	15.9129	79.74
3	15.9129	79.74
4	15.9129	79.74

Checking the Dataset contains whether it contains missing values or not

```
print(data.isnull().sum())
```

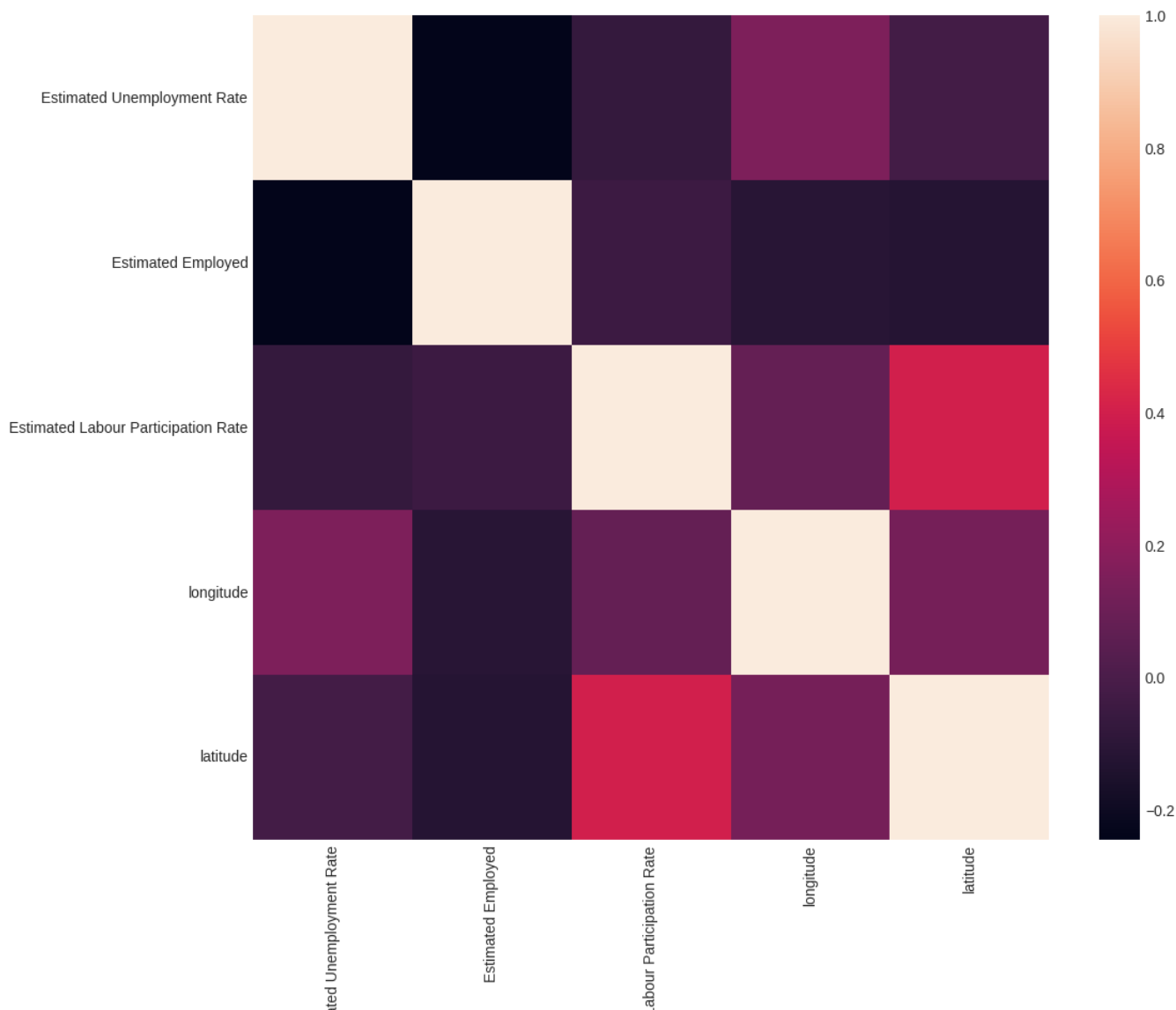
```
Region      0
Date        0
Frequency   0
Estimated Unemployment Rate (%)  0
Estimated Employed      0
Estimated Labour Participation Rate (%)  0
Region.1      0
longitude     0
latitude     0
dtype: int64
```

Renaming the columns names.

```
data.columns= ["States","Date","Frequency",
               "Estimated Unemployment Rate",
               "Estimated Employed",
               "Estimated Labour Participation Rate",
               "Region","longitude","latitude"]
```

```
plt.style.use('seaborn-whitegrid')
plt.figure(figsize=(12, 10))
sns.heatmap(data.corr())
plt.show()
```

```
<ipython-input-9-0c964a6ebb84>:1: MatplotlibDeprecationWarning: The seaborn styles shipped by Matplotlib are deprecated since 3.6,
plt.style.use('seaborn-whitegrid')
<ipython-input-9-0c964a6ebb84>:3: FutureWarning: The default value of numeric_only in DataFrame.corr is deprecated. In a future ver
sns.heatmap(data.corr())
```



```
data.columns= ["States", "Date", "Frequency",
               "Estimated Unemployment Rate", "Estimated Employed",
               "Estimated Labour Participation Rate", "Region",
               "longitude", "latitude"]
```

```
#for displaying the title above our histogram
plt.title("Indian Unemployment in different regions of India")
# for displaying it in histogram
sns.histplot(x="Estimated Employed", hue="Region", data=data)
plt.show()
```

Indian Unemployment in different regions of India

```
unemployment = data[["States", "Region", "Estimated Unemployment Rate"]]  
  
# Sunburst plots visualize hierarchical data spanning outwards radially from root to leaves  
figure = px.sunburst(unemployment, path=["Region", "States"],  
                     values="Estimated Unemployment Rate",  
                     width=700, height=700, color_continuous_scale="RdYlGn",  
                     title="Unemployment Rate in India")  
  
# show() starts an event loop, looks for all currently active figure objects,  
# and opens one or more interactive windows that display your figure or figures.  
figure.show()
```

Unemployment Rate in India

