

```
In [28]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
import plotly.express as px

data = pd.read_csv("https://raw.githubusercontent.com/amankharwal/Website-data")
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

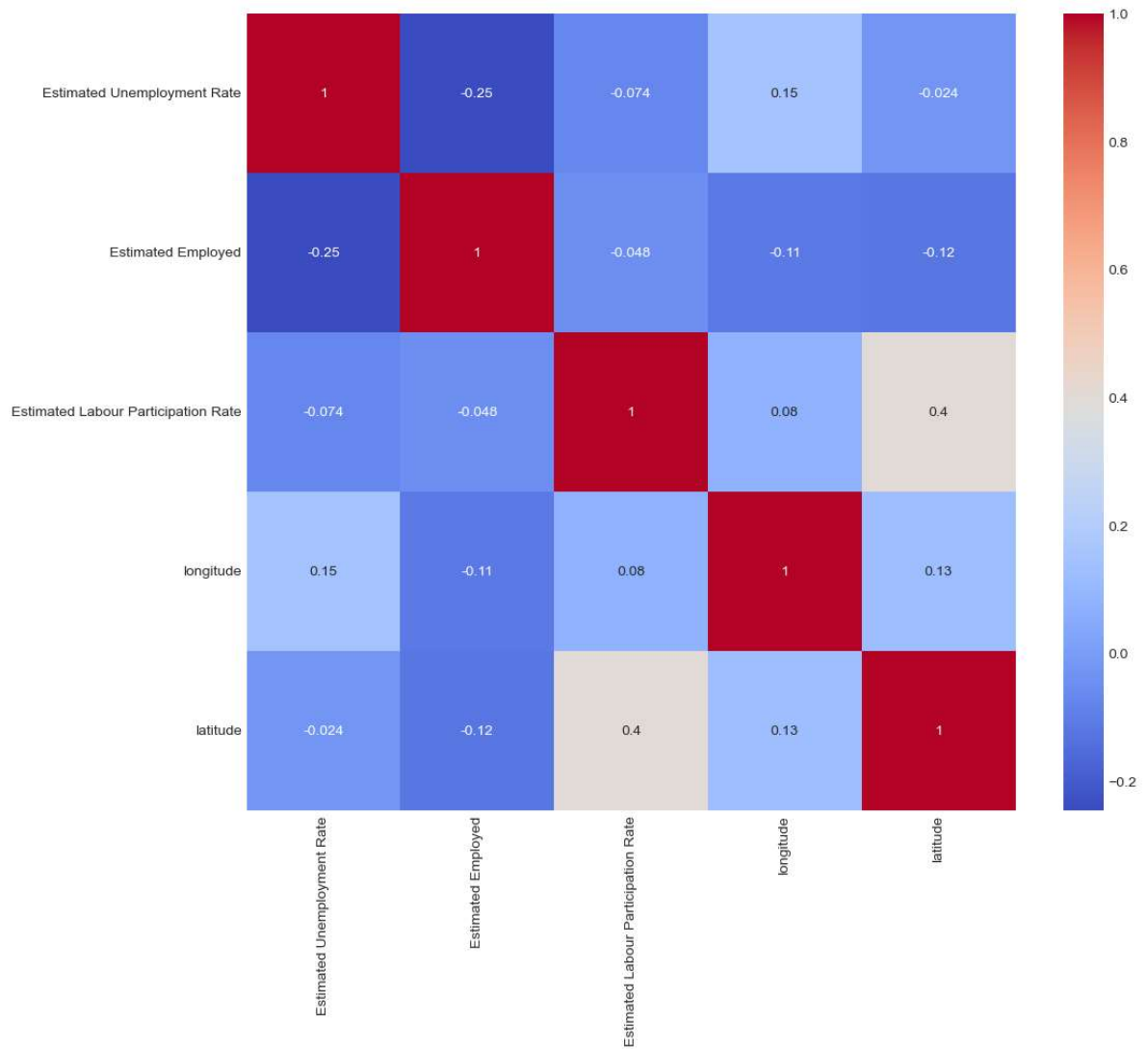
```
In [29]: print(data.isnull().sum())
```

```
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
```

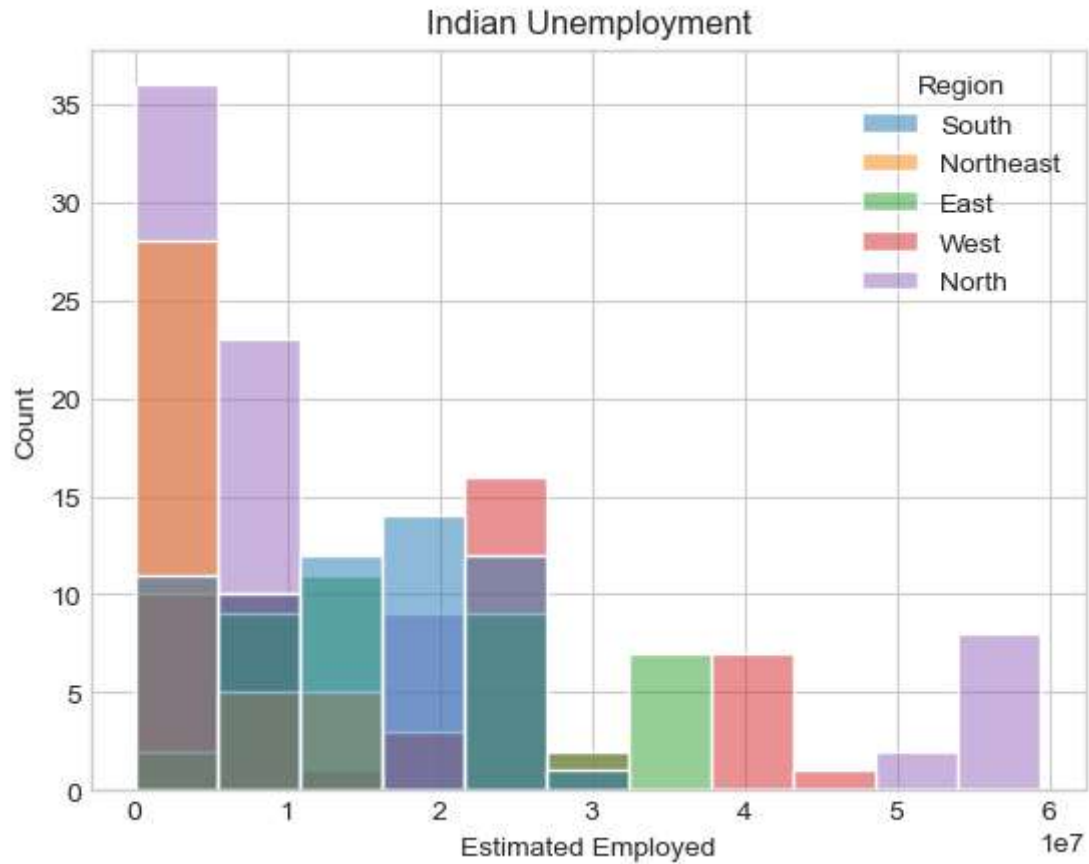
```
In [30]: data.columns= ["States", "Date", "Frequency",
                        "Estimated Unemployment Rate",
                        "Estimated Employed",
                        "Estimated Labour Participation Rate",
                        "Region", "longitude", "latitude"]
```

```
In [31]: numeric_data = data.select_dtypes(include='number')
correlation_matrix = numeric_data.corr()

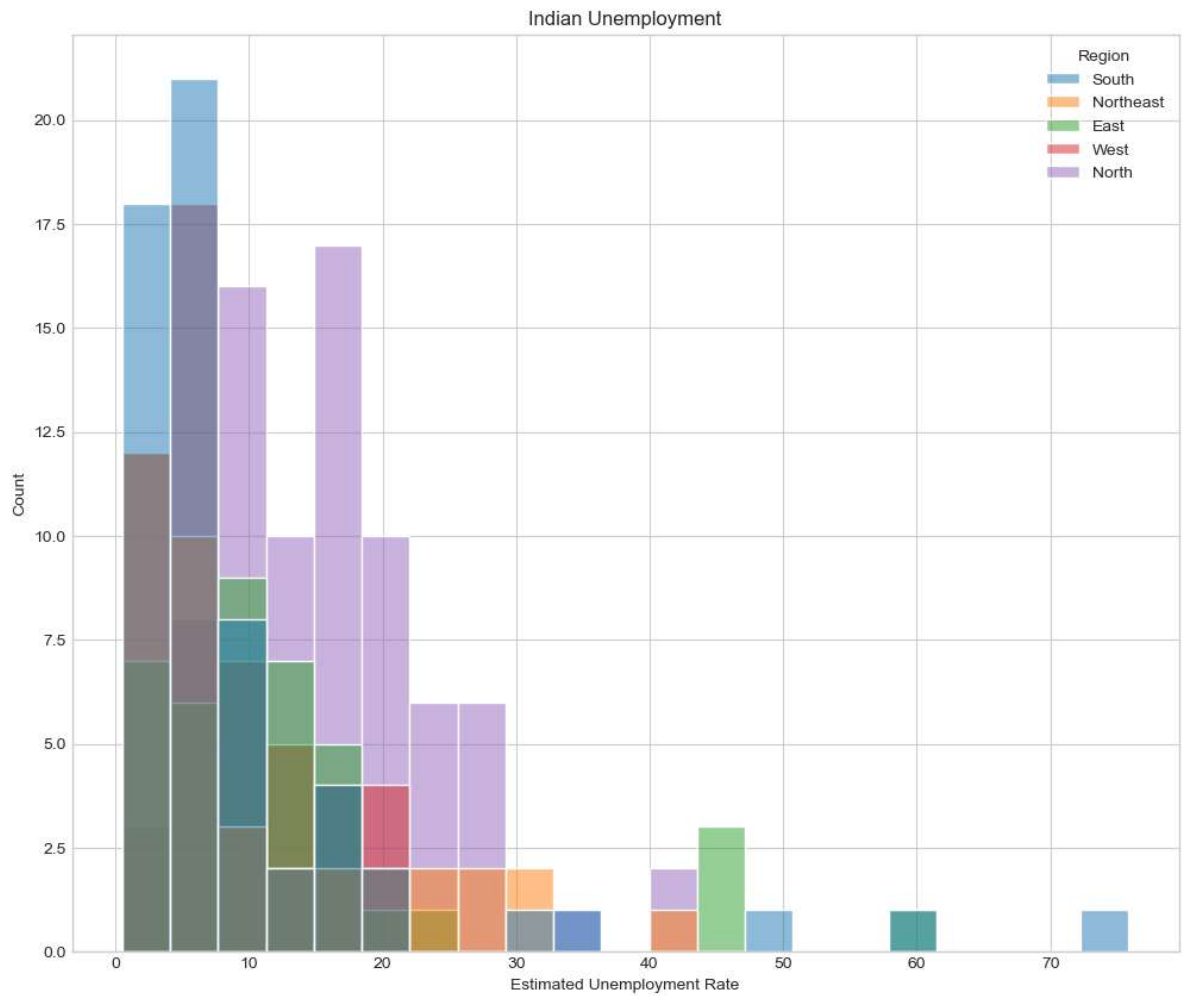
plt.figure(figsize=(12, 10))
sns.heatmap(correlation_matrix, annot=True, cmap='coolwarm')
plt.show()
```



```
In [32]: data.columns= ["States", "Date", "Frequency",  
                        "Estimated Unemployment Rate", "Estimated Employed",  
                        "Estimated Labour Participation Rate", "Region",  
                        "longitude", "latitude"]  
plt.title("Indian Unemployment")  
sns.histplot(x="Estimated Employed", hue="Region", data=data)  
plt.show()
```



```
In [33]: plt.figure(figsize=(12, 10))
plt.title("Indian Unemployment")
sns.histplot(x="Estimated Unemployment Rate", hue="Region", data=data)
plt.show()
```



```
In [39]: unemployment = data[["States", "Region", "Estimated Unemployment Rate"]]
figure = px.sunburst(unemployment, path=["Region", "States"],
                    values="Estimated Unemployment Rate",
                    width=700, height=700, color_continuous_scale="Reds",
                    title="Unemployment Rate in India")
figure.update_layout(
    sunburstcolorway=["#FF5733", "#FFBD33", "#FF5733", "#FF5733", "#FFBD33", "#FF5733"],
    uniformtext=dict(minsize=12, mode='hide'), # Adjust text size for better
)
figure.show()
```



