In [1]:
```
import numpy as np
import pandas as pd
```

Readin CSV filr

In [2]:
```
df=pd.read_csv("india.csv")
```

In [3]:
```
df.head()
```

Out[3]:

	Region	Date	Frequency	Estimated Unemployment Rate (%)	Estimated Employed	Estimated Labour Participation Rate (%)	Area
0	Andhra Pradesh	31-05-2019	Monthly	3.65	11999139.0	43.24	Rural
1	Andhra Pradesh	30-06-2019	Monthly	3.05	11755881.0	42.05	Rural
2	Andhra Pradesh	31-07-2019	Monthly	3.75	12086707.0	43.50	Rural
3	Andhra Pradesh	31-08-2019	Monthly	3.32	12289693.0	43.97	Rural
4	Andhra Pradesh	30-09-2019	Monthly	5.17	12556762.0	44.68	Rural

In [4]:
```
df.tail()
```

Out[4]:

	Region	Date	Frequency	Estimated Unemployment Rate (%)	Estimated Employed	Estimated Labour Participation Rate (%)	Area
763	NaN	NaN	NaN	NaN	NaN	NaN	NaN
764	NaN	NaN	NaN	NaN	NaN	NaN	NaN
765	NaN	NaN	NaN	NaN	NaN	NaN	NaN
766	NaN	NaN	NaN	NaN	NaN	NaN	NaN
767	NaN	NaN	NaN	NaN	NaN	NaN	NaN

In [5]:
```
df.shape
```

Out[5]:
```
(768, 7)
```

In [6]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 768 entries, 0 to 767
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    float64
 5   Estimated Labour Participation Rate (%)  740 non-null    float64
 6   Area                                     740 non-null    object 
dtypes: float64(3), object(4)
memory usage: 42.1+ KB
```

In [7]:
```
df.describe()
```

Out[7]:

	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

In [8]:
```
x= df['Region']
```

In [9]:
```
x
```

Out[9]:
```
0      Andhra Pradesh
1      Andhra Pradesh
2      Andhra Pradesh
3      Andhra Pradesh
4      Andhra Pradesh
            ...      
763               NaN
764               NaN
765               NaN
766               NaN
767               NaN
Name: Region, Length: 768, dtype: object
```

In [10]:
```
y=df[' Estimated Unemployment Rate (%)']
```

In [11]:
```
y
```

Out[11]:
```
0      3.65
1      3.05
2      3.75
3      3.32
4      5.17
       ... 
763     NaN
764     NaN
765     NaN
766     NaN
767     NaN
Name:  Estimated Unemployment Rate (%), Length: 768, dtype: float64
```

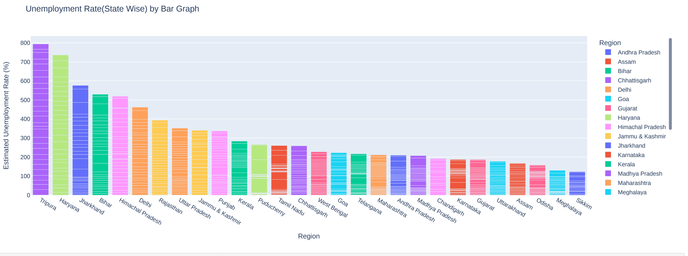
In [12]:
```
df2=df.iloc[:,2]
```

In [13]:
```
df2
```

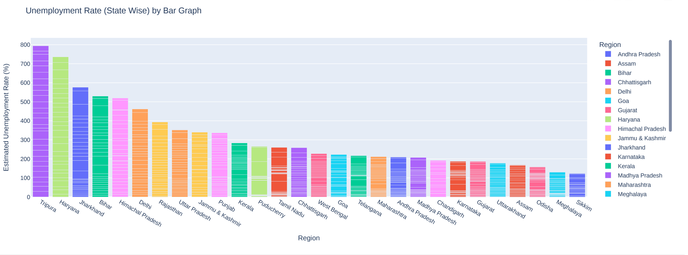
Out[13]:
```
0      3.65
1      3.05
2      3.75
3      3.32
4      5.17
       ... 
763     NaN
764     NaN
765     NaN
766     NaN
767     NaN
Name:  Estimated Unemployment Rate (%), Length: 768, dtype: float64
```

In [14]:
```
import plotly.express as px
import matplotlib as plt
```

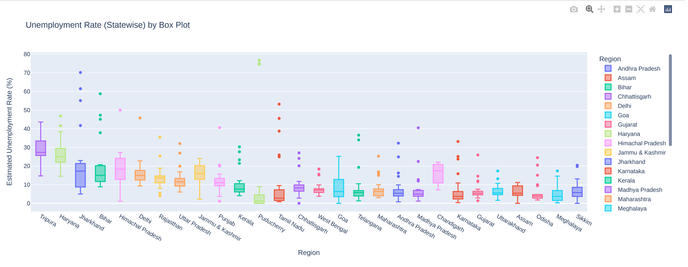
In [15]:
```
fg = px.bar(df,x='Region' ,y=' Estimated Unemployment Rate (%)' ,color='Region' ,title='Unemployment Rate(State Wise) by Bar Graph', template='plotly')
fg.update_layout(xaxis={'categoryorder':'total descending'})
fg.show()
```



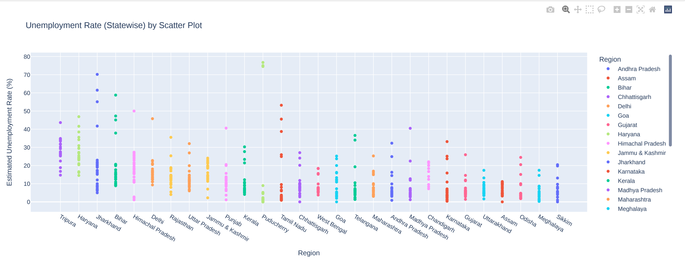
In [16]:
```
fg= px.bar(df,x='Region' ,y=' Estimated Unemployment Rate (%)' ,color='Region'  ,title='Unemployment Rate (State Wise) by Bar Graph' ,template='plotly')
fg.update_layout(xaxis={'categoryorder':'total descending'})
fg.show()
```



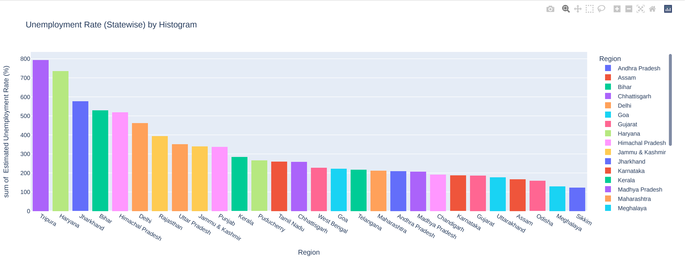
In [17]:
```
fg = px.box(df ,x='Region' ,y=' Estimated Unemployment Rate (%)' ,color='Region' ,title='Unemployment Rate (Statewise) by Box Plot' ,template='plotly')
fg.update_layout(xaxis={'categoryorder':'total descending'})
fg.show()
```



In [18]:
```
fg = px.scatter(df,x='Region' ,y=' Estimated Unemployment Rate (%)' ,color='Region' ,title='Unemployment Rate (Statewise) by Scatter Plot' ,template='plotly')
fg.update_layout(xaxis={'categoryorder':'total descending'})
fg.show()
```



In [20]:
```
fg = px.histogram(df,x='Region' ,y=' Estimated Unemployment Rate (%)' ,color='Region' ,title='Unemployment Rate (Statewise) by Histogram' ,template='plotly')
fg.update_layout(xaxis={'categoryorder':'total descending'})
fg.show()
```



In [ ]: