```
'''
NAME           : DEEKSHA R SHETTY
COLLEGE        : DAYANANDA SAGAR UNIVERSITY
BRANCH         : AEROSPACE ENGINEERING
YEAR           : FIRST YEAR
DATASET SOURCE : KAGGLE
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'''


#Creating DataFrame from dataset
import pandas as pd
df = pd.read_csv('/content/covid 19 CountryWise.csv')
df
```

	Country	Region	Total Cases	Total Cases per 100k pop	New Cases (7 days)	New Cases pe 100k pop (days
0	United States of America	Americas	94152573	28444.658	416281	125.76
1	India	South-East Asia	44516479	3225.822	37843	2.74
2	Brazil	Americas	34544377	16251.633	53446	25.14
3	France	Europe	33766090	51916.394	150781	231.83
4	Germany	Europe	32604993	39204.380	203649	244.86
...	...	...	...	...	...	.
232	Pitcairn Islands	Western Pacific	4	8000.000	0	0.00
233	Democratic People's Republic of Korea	South-East Asia	0	0.000	0	0.00
234	Saint Helena	Africa	0	0.000	0	0.00
235	Tokelau	Western Pacific	0	0.000	0	0.00
236	Turkmenistan	Europe	0	0.000	0	0.00

237 rows × 12 columns

```
#to extract information from DataFrame
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 237 entries, 0 to 236
Data columns (total 12 columns):
 #   Column                           Non-Null Count  Dtype
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```

```
 0   Country                          237 non-null    object
 1   Region                           237 non-null    object
 2   Total Cases                      237 non-null    int64
 3   Total Cases per 100k pop         236 non-null    float64
 4   New Cases (7 days)               237 non-null    int64
 5   New Cases per 100k pop (7 days)  236 non-null    float64
 6   New Cases (24 hours)             237 non-null    int64
 7   Total Deaths                     237 non-null    int64
 8   Total Deaths per 100k pop        236 non-null    float64
 9   New Deaths (7 days)              237 non-null    int64
 10  New Deaths per 100k pop (7 days) 236 non-null    float64
 11  New Deaths (24 hours)            237 non-null    int64
dtypes: float64(4), int64(6), object(2)
memory usage: 22.3+ KB
```

```
#to find the number of rows and columns, this DataFrame has 237 rows and 12 columns
df.shape
```

```
(237, 12)
```

```
#to find total number of elements in the DataFrame
df.size
```

```
2844
```

```
#to find the missing values and null values
df.isnull().sum()
```

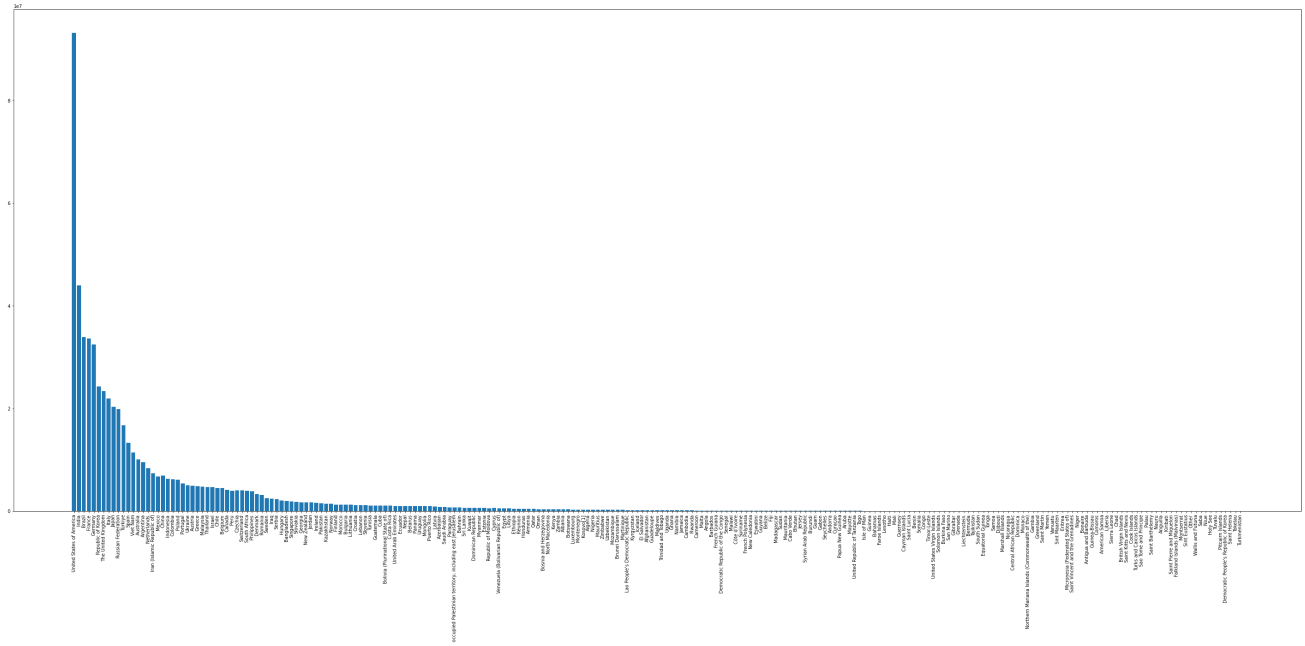
```
Country                          0
Region                           0
Total Cases                      0
Total Cases per 100k pop         1
New Cases (7 days)               0
New Cases per 100k pop (7 days)  1
New Cases (24 hours)             0
Total Deaths                     0
Total Deaths per 100k pop        1
New Deaths (7 days)              0
New Deaths per 100k pop (7 days) 1
New Deaths (24 hours)            0
dtype: int64
```

```
# Visualization
```

```
#1.to find the total number of people recovered in each country using visualization techni
import matplotlib.pyplot as plt
recovery=df['Total Cases']-df['Total Deaths']
plt.figure(figsize=(50,20))
```

```
plt.xticks(rotation='vertical')
plt.bar(df['Country'],recovery)
```

```
<BarContainer object of 237 artists>
```



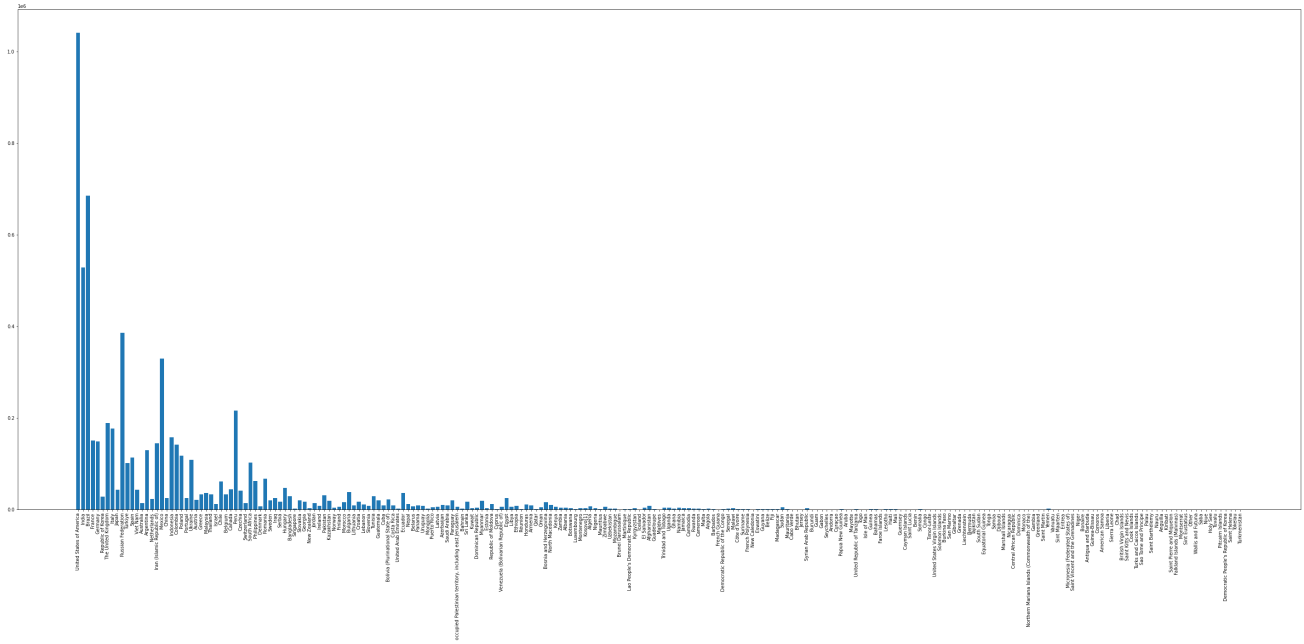
```
#2.To find maximum number of cases in a country
df['Total Cases'].max()
```

```
94152573
```

```
#3.To find the maximum death in all countries using visualization technique
plt.figure(figsize=(50,20))
```

```
plt.xticks(rotation='vertical')
plt.bar(df['Country'],df['Total Deaths'])
```

```
<BarContainer object of 237 artists>
```



```
#4.To find the total number of cases reported in all countries using visualization techniq
plt.figure(figsize=(50,20))
plt.xticks(rotation='vertical')
plt.bar(df['Country'],df['Total Cases'])
```

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<BarContainer object of 237 artists>
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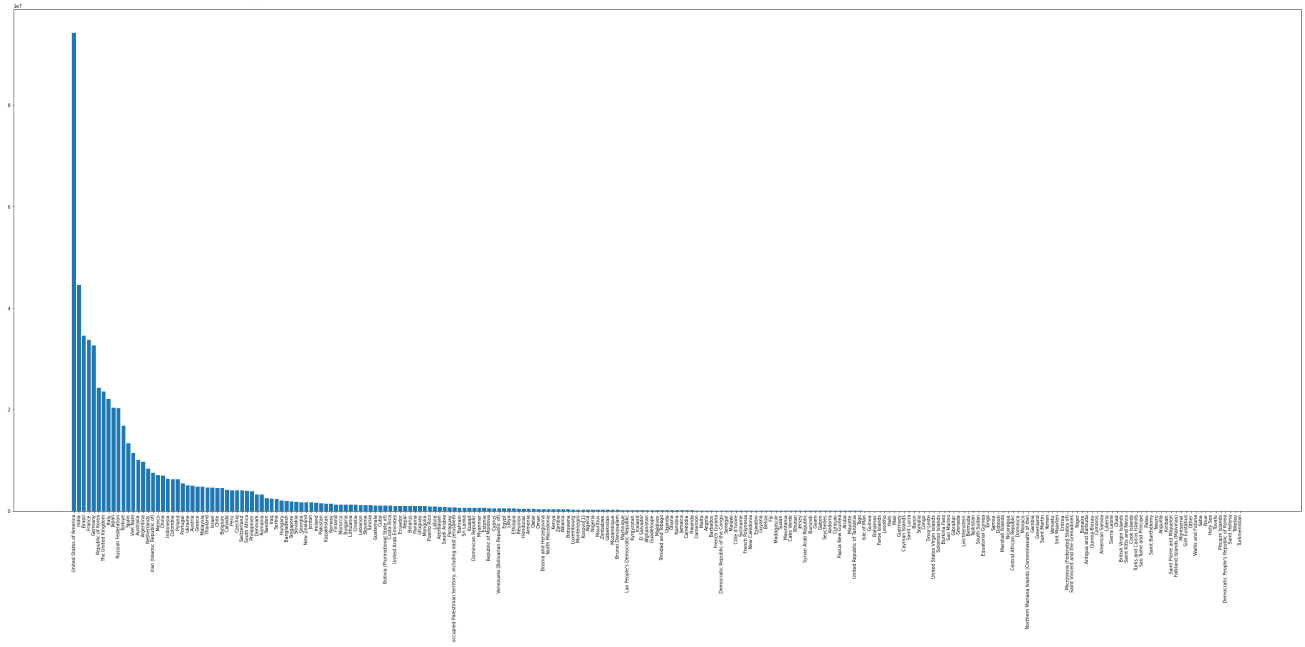

```
#5.To find the maximum number of cases reported in a country in a day using visualization
plt.figure(figsize=(50,20))
plt.xticks(rotation='vertical')
plt.bar(df['Country'],df['New Cases (24 hours)'])
```

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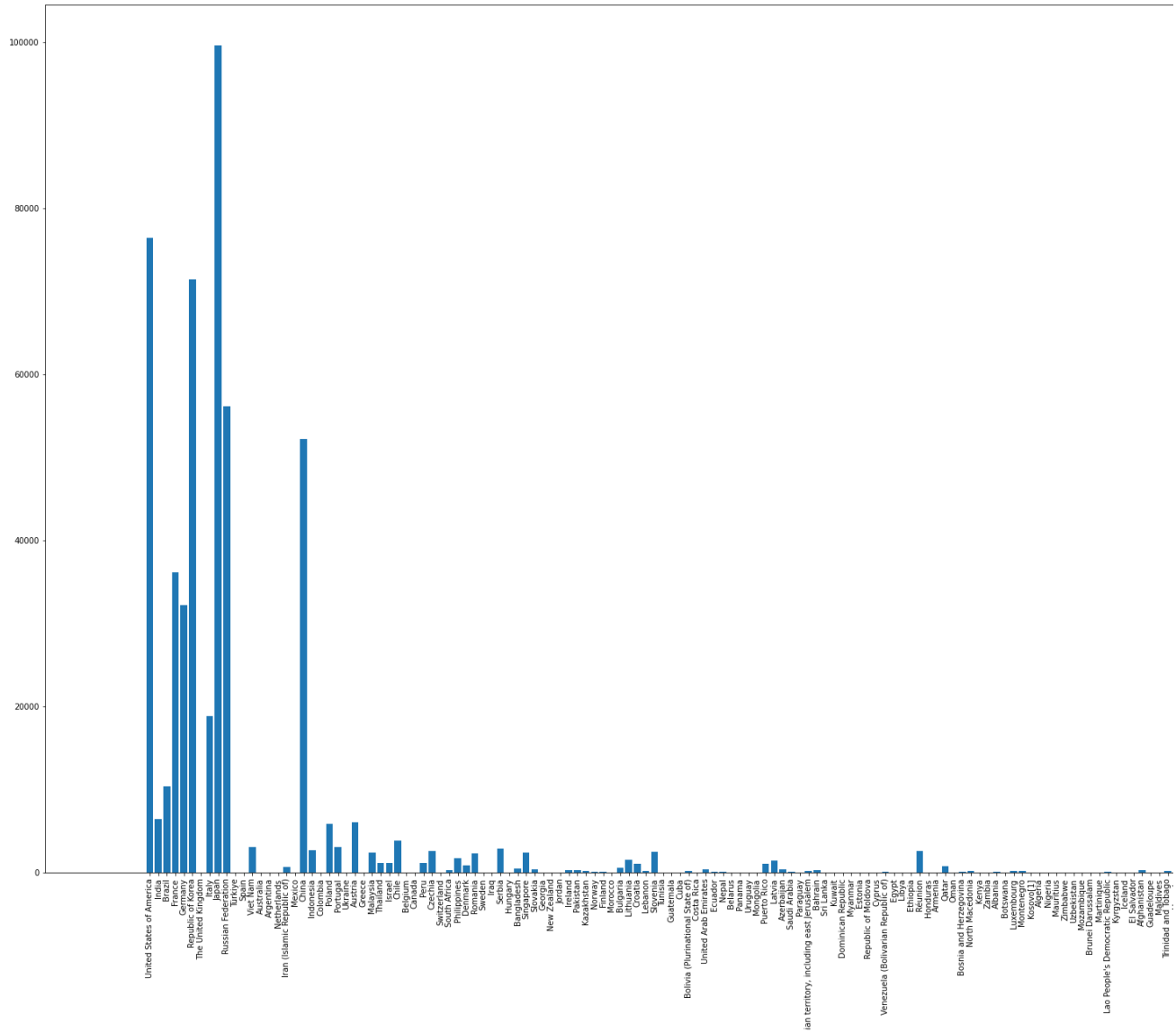

```
#6.To find maximum number of deaths in a country
df['Total Deaths'].max()
```

```
1040506
```

```
#7.To find the maximum number of new cases reported in a country in a week using visualiza
plt.figure(figsize=(50,20))
plt.xticks(rotation='vertical')
plt.bar(df['Country'],df['New Cases (7 days)'])
```

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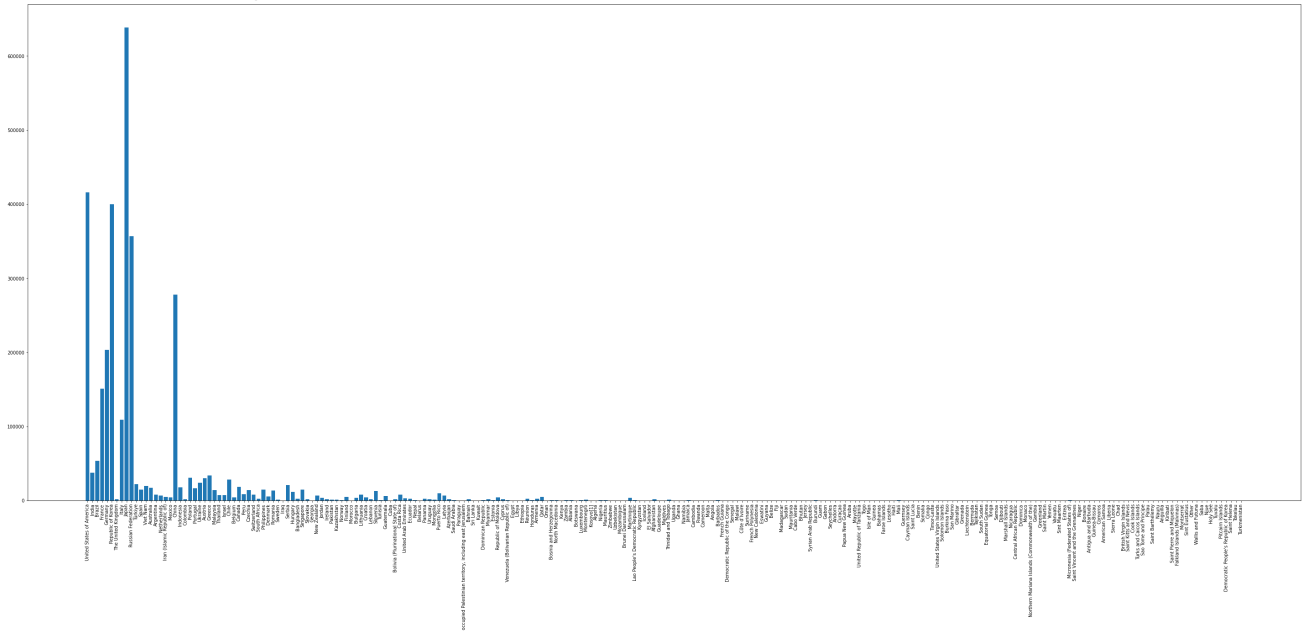

```
#8.to find the total number of people recovered in each country in a week using visualizat
import matplotlib.pyplot as plt
recovery=df['New Cases (7 days)']-df['New Deaths (7 days)']
plt.figure(figsize=(50,20))
plt.xticks(rotation='vertical')
plt.bar(df['Country'],recovery)
```

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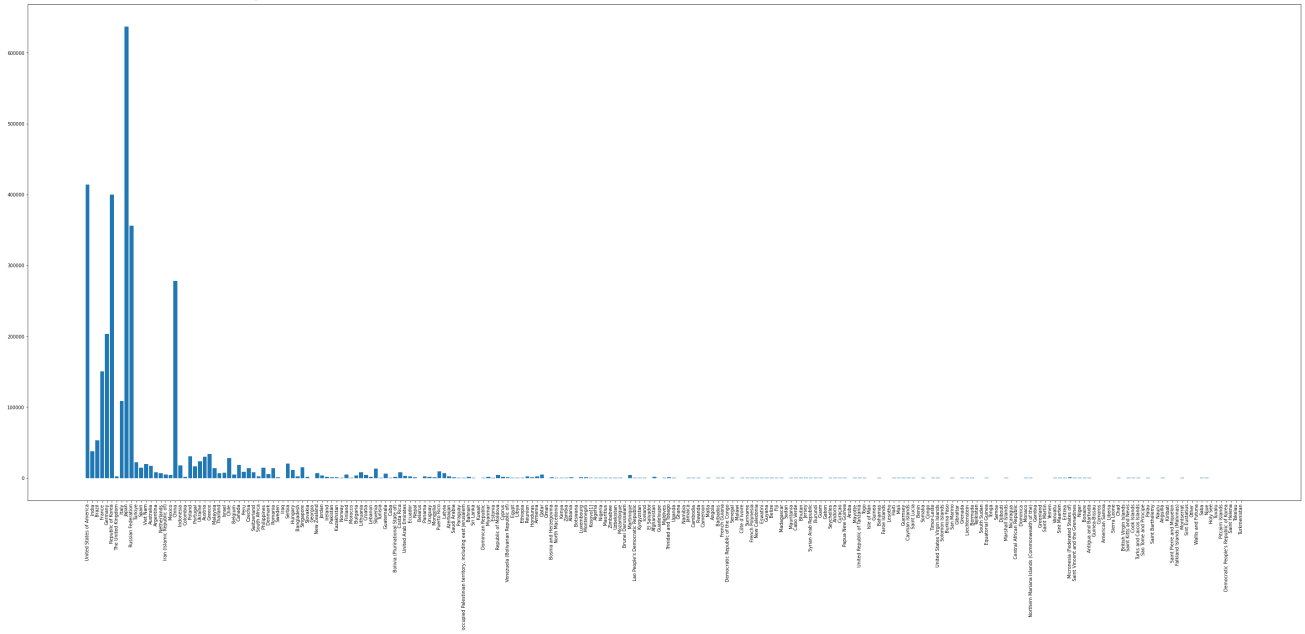

```
#9.To find the maximum number of deaths reported in a country in a day using visualization
plt.figure(figsize=(50,20))
plt.xticks(rotation='vertical')
plt.bar(df['Country'],df['New Deaths (24 hours)'])
```

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<BarContainer object of 237 artists>
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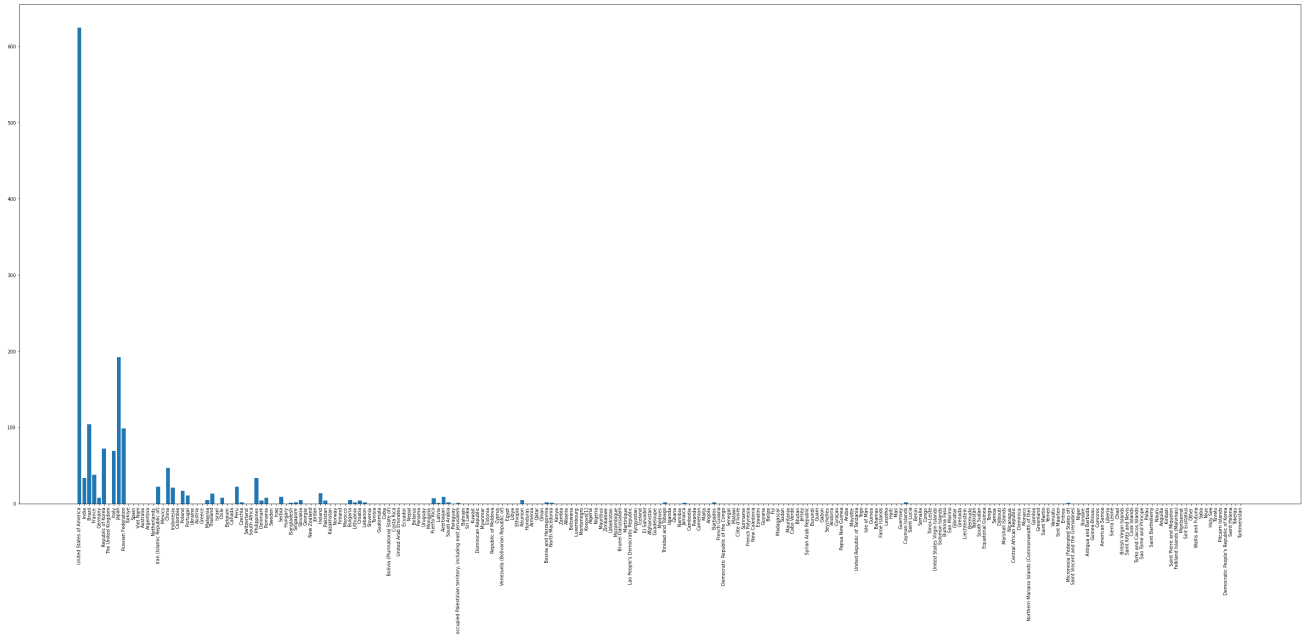

```
#10.To find the total number of deaths in 1 million reported in all countries in a week us
plt.figure(figsize=(50,20))
plt.xticks(rotation='vertical')
plt.bar(df['Country'],df['New Deaths per 100k pop (7 days)'])
```

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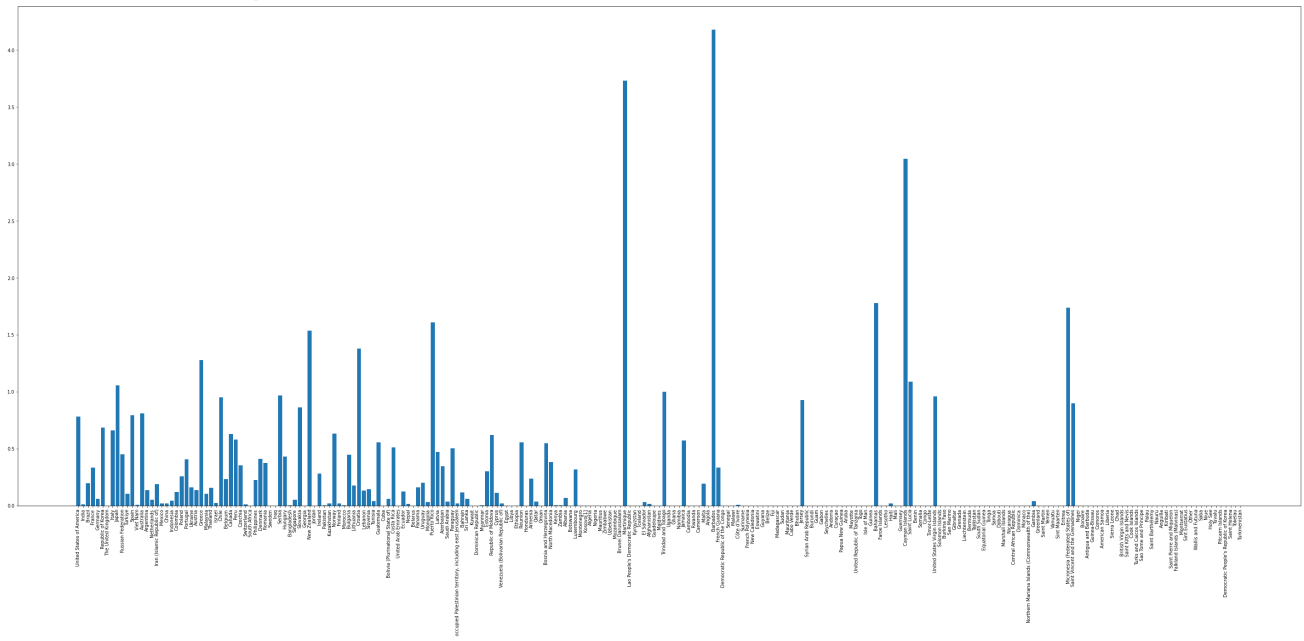
```



```
#11.To find the total number of cases in 1 million reported in all countries in a week usi
plt.figure(figsize=(50,20))
plt.xticks(rotation='vertical')
plt.bar(df['Country'],df['New Cases per 100k pop (7 days)'])
```

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<BarContainer object of 237 artists>
```

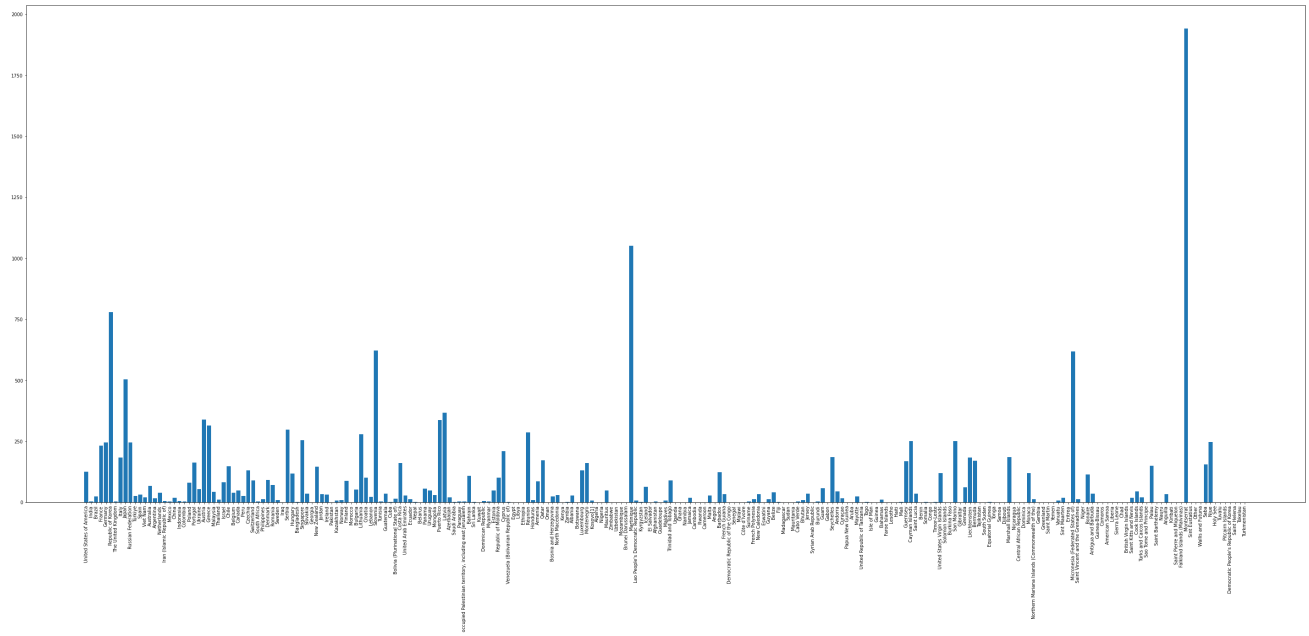

```
#12.to find the total number of people recovered in each country in 1 milion population us
import matplotlib.pyplot as plt
recovery=df['Total Cases per 100k pop']-df['Total Deaths per 100k pop']
plt.figure(figsize=(50,20))
plt.xticks(rotation='vertical')
plt.bar(df['Country'],recovery)
```

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<BarContainer object of 237 artists>
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