

```
In [3]: import os
import pandas as pd

# Verify working directory
print("Current working directory:", os.getcwd())

# Pull file
file_path = os.path.abspath(r"C:\Users\MrNic\Documents\NMSDataCountryV1.csv")
print("Absolute file path:", file_path)

# Read file
df = pd.read_csv(file_path)

# Display df
df
```

Current working directory: C:\Users\MrNic
Absolute file path: C:\Users\MrNic\Documents\NMSDataCountryV1.csv

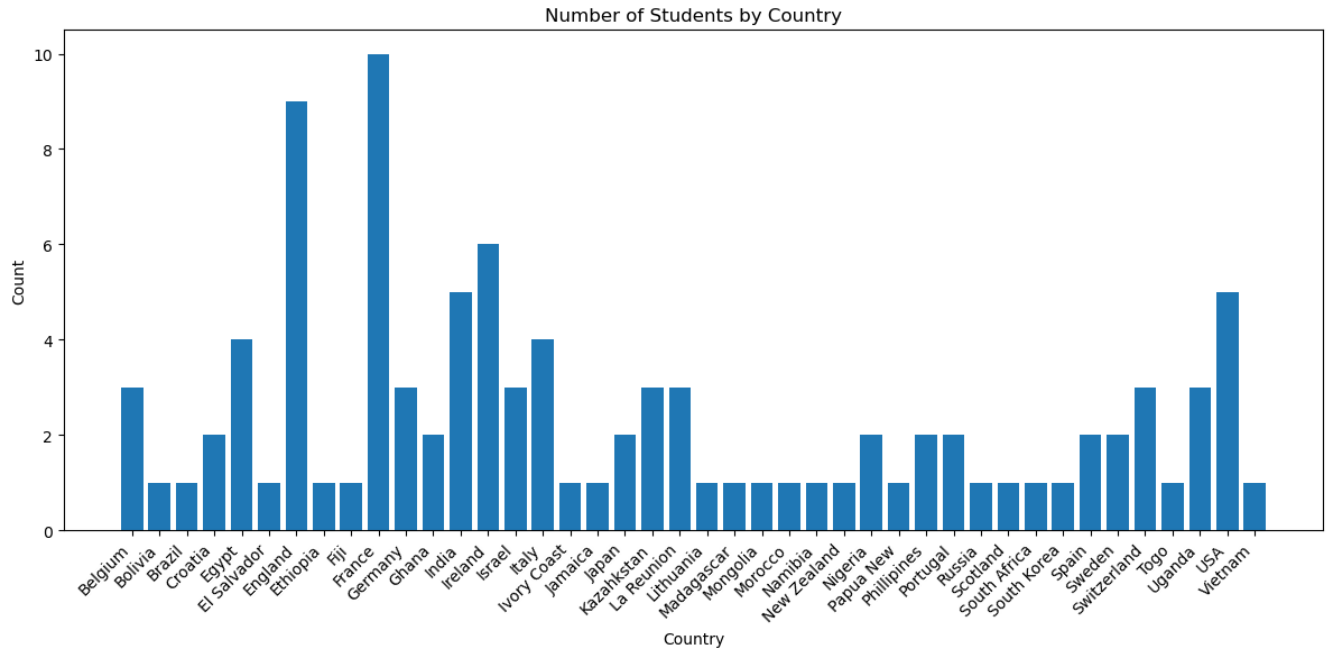
Out[3]:

	Country	Count
0	Belgium	3
1	Bolivia	1
2	Brazil	1
3	Croatia	2
4	Egypt	4
5	El Salvador	1
6	England	9
7	Ethiopia	1
8	Fiji	1
9	France	10
10	Germany	3
11	Ghana	2
12	India	5
13	Ireland	6
14	Israel	3
15	Italy	4
16	Ivory Coast	1
17	Jamaica	1
18	Japan	2
19	Kazakhstan	3
20	La Reunion	3
21	Lithuania	1
22	Madagascar	1
23	Mongolia	1
24	Morocco	1
25	Namibia	1
26	New Zealand	1
27	Nigeria	2
28	Papua New	1
29	Phillipines	2
30	Portugal	2
31	Russia	1
32	Scotland	1
33	South Africa	1
34	South Korea	1
35	Spain	2
36	Spain	2
37	Sweden	2
38	Switzerland	3
39	Togo	1
40	Uganda	3
41	USA	5
42	Vietnam	1

```
In [4]: import matplotlib.pyplot as plt

# Simple Bar Graph
plt.figure(figsize=(12, 6))
plt.bar(df['Country'], df['Count'])
plt.xlabel('Country')
plt.ylabel('Count')
plt.title('Number of Students by Country')
plt.xticks(rotation=45, ha='right')
```

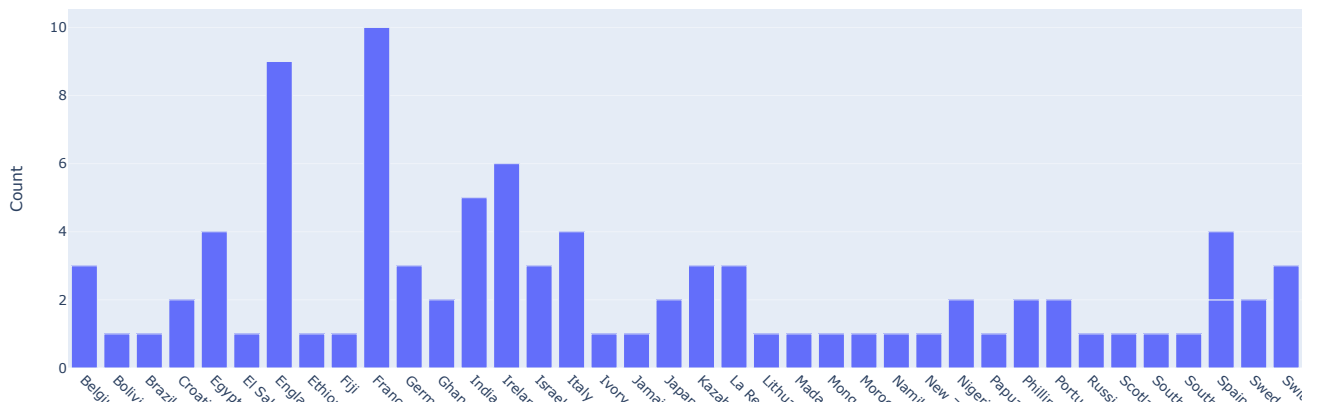
```
plt.tight_layout()
plt.show()
```



```
In [5]: import plotly.express as px

# Interactive Bar Graph
fig = px.bar(df, x='Country', y='Count', title='Number of Students by Country')
fig.update_layout(xaxis=dict(tickangle=45)) # Rotate x-axis labels for better readability
fig.show()
```

Number of Students by Country



```
In [22]: import pandas as pd
import plotly.express as px

# Pull file
file_path = os.path.abspath(r"C:\Users\MrNic\Documents\NMSDataCountryV1.csv")

df = pd.read_csv(file_path)

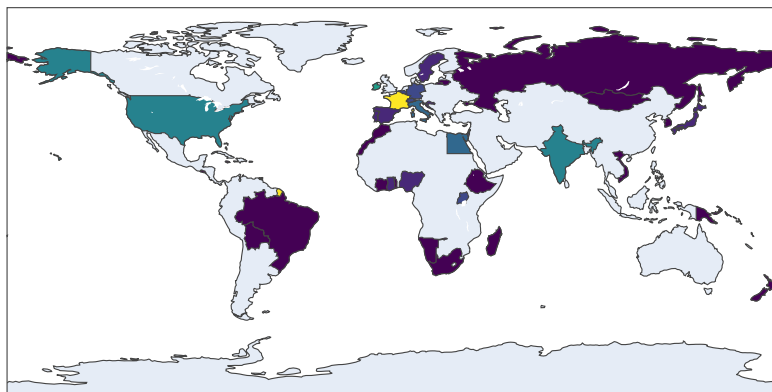
# Count values for every country
count_list = [3, 1, 1, 2, 4, 1, 9, 1, 1, 10, 3, 2, 5, 6, 3, 4, 1, 1, 2, 3, 3, 1, 1, 1, 1, 1, 1, 2, 2, 1, 1, 1, 1, 2, 2, 2, 3, 1, 3, 5, 1]

# Values to DataFrame
df['Count'] = count_list

# Choropleth map using Plotly
fig = px.choropleth(
    df,
    locations='Country',
    locationmode='country names', # Set location mode to 'country names'
    color='Count',
    hover_name='Country',
    color_continuous_scale='Viridis',
    title='Number of Students by Country'
)

fig.show()
```

Number of Students by Country



In []: