

# GRADUATE ROTATIONAL INTERSHIP PROGRAM - JUNE 2023

## Data Science & Business Analytics Internship Task\_4 :-

### Exploratory Data Analysis - Terrorism

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In this task, we will be performing exploratory data analysis on the dataset "GlobalTerrorism" and try to find out the hot zone of terrorism. Also, we will derive the security issues and various insights.

### Importing Libraries needed to perform task

```
In [ ]: # Importing all the libraries needed in this notebook
import math
import warnings
import numpy as np
import pandas as pd # data processing, CSV file I/O (e.g. pd.read_csv)
import seaborn as sns
import plotly.offline as py
import plotly.graph_objs as go
import matplotlib.pyplot as plt
warnings.filterwarnings('ignore')
```

### Step 1 : Loading and Reading The Data Set

```
In [ ]: global_terror = pd.read_csv(r'C:\Users\HOME\Downloads\globalterrorismdb_0718dist
```

```
In [ ]: global_terror.head() # first five values of the dataset
```

```
Out[ ]:
```

	eventid	iyear	imonth	iday	approxdate	extended	resolution	country	coun
0	1970000000001	1970	7	2	NaN	0	NaN	58	Do
1	1970000000002	1970	0	0	NaN	0	NaN	130	
2	1970010000001	1970	1	0	NaN	0	NaN	160	Phi
3	1970010000002	1970	1	0	NaN	0	NaN	78	
4	1970010000003	1970	1	0	NaN	0	NaN	101	

5 rows × 135 columns

```
In [ ]: global_terror.columns
```

```
Out[ ]: Index(['eventid', 'iyear', 'imonth', 'iday', 'approxdate', 'extended',
              'resolution', 'country', 'country_txt', 'region',
              ...,
              'addnotes', 'scite1', 'scite2', 'scite3', 'dbsource', 'INT_LOG',
              'INT_IDEO', 'INT_MISC', 'INT_ANY', 'related'],
              dtype='object', length=135)
```

```
In [ ]: global_terror.rename(columns={'iyear': 'Year', 'imonth': 'Month', 'iday': 'Day', 'coun
                                     'region_txt': 'Region', 'attacktype1_txt': 'AttackType', 'tar
                                     'nwound': 'Wounded', 'summary': 'Summary', 'gname': 'Group', 't
                                     'weaptype1_txt': 'Weapon_type', 'motive': 'Motive'}, inplace=
```

## Step 2 : Dropping out irrelevant columns

```
In [ ]: # Important data for further processing
global_terror=global_terror[['Year', 'Month', 'Day', 'Country', 'state', 'Region', 'ci
                             'Wounded', 'Target', 'Summary', 'Group', 'Target_type', 'Weapon_type',
```

```
In [ ]: global_terror.head()
```

```
Out[ ]:
```

	Year	Month	Day	Country	state	Region	city	latitude	longitude
0	1970	7	2	Dominican Republic	NaN	Central America & Caribbean	Santo Domingo	18.456792	-69.951164
1	1970	0	0	Mexico	Federal	North America	Mexico city	19.371887	-99.086624
2	1970	1	0	Philippines	Tarlac	Southeast Asia	Unknown	15.478598	120.599741
3	1970	1	0	Greece	Attica	Western Europe	Athens	37.997490	23.762728
4	1970	1	0	Japan	Fukouka	East Asia	Fukouka	33.580412	130.396361

```
In [ ]: # Checking for the null values
global_terror.isnull().sum()
```

```
Out[ ]:
```

Year	0
Month	0
Day	0
Country	0
state	421
Region	0
city	434
latitude	4556
longitude	4557
AttackType	0
Killed	10313
Wounded	16311
Target	636
Summary	66129
Group	0
Target_type	0
Weapon_type	0
Motive	131130
dtype:	int64

## Step 3 : Checking the dataset's information

```
In [ ]: global_terror.info() # Returns the concise summary
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 181691 entries, 0 to 181690
Data columns (total 18 columns):
#   Column          Non-Null Count  Dtype
---  -
0   Year            181691 non-null  int64
1   Month           181691 non-null  int64
2   Day             181691 non-null  int64
3   Country         181691 non-null  object
4   state           181270 non-null  object
5   Region          181691 non-null  object
6   city            181257 non-null  object
7   latitude        177135 non-null  float64
8   longitude       177134 non-null  float64
9   AttackType      181691 non-null  object
10  Killed          171378 non-null  float64
11  Wounded         165380 non-null  float64
12  Target          181055 non-null  object
13  Summary         115562 non-null  object
14  Group           181691 non-null  object
15  Target_type     181691 non-null  object
16  Weapon_type     181691 non-null  object
17  Motive          50561 non-null   object
dtypes: float64(4), int64(3), object(11)
memory usage: 25.0+ MB
```

## Step 4 : Data Visualization

### Destructive Features

```
In [ ]: print("Country with the most attacks:",global_terror['Country'].value_counts().i
print("City with the most attacks:",global_terror['city'].value_counts().index[1
print("Region with the most attacks:",global_terror['Region'].value_counts().idx
print("Year with the most attacks:",global_terror['Year'].value_counts().idxmax(
print("Month with the most attacks:",global_terror['Month'].value_counts().idxma
print("Group with the most attacks:",global_terror['Group'].value_counts().index
print("Most Attack Types:",global_terror['AttackType'].value_counts().idxmax())
```

```
Country with the most attacks: Iraq
City with the most attacks: Baghdad
Region with the most attacks: Middle East & North Africa
Year with the most attacks: 2014
Month with the most attacks: 5
Group with the most attacks: Taliban
Most Attack Types: Bombing/Explosion
```

```
In [ ]: from wordcloud import WordCloud
from scipy import signal
cities = global_terror.state.dropna(False)
plt.subplots(figsize=(20,10))
wordcloud = WordCloud(background_color = 'black',
                      width = 500,
                      height = 400).generate(' '.join(cities))

plt.axis('off')
plt.imshow(wordcloud)
plt.show()
```

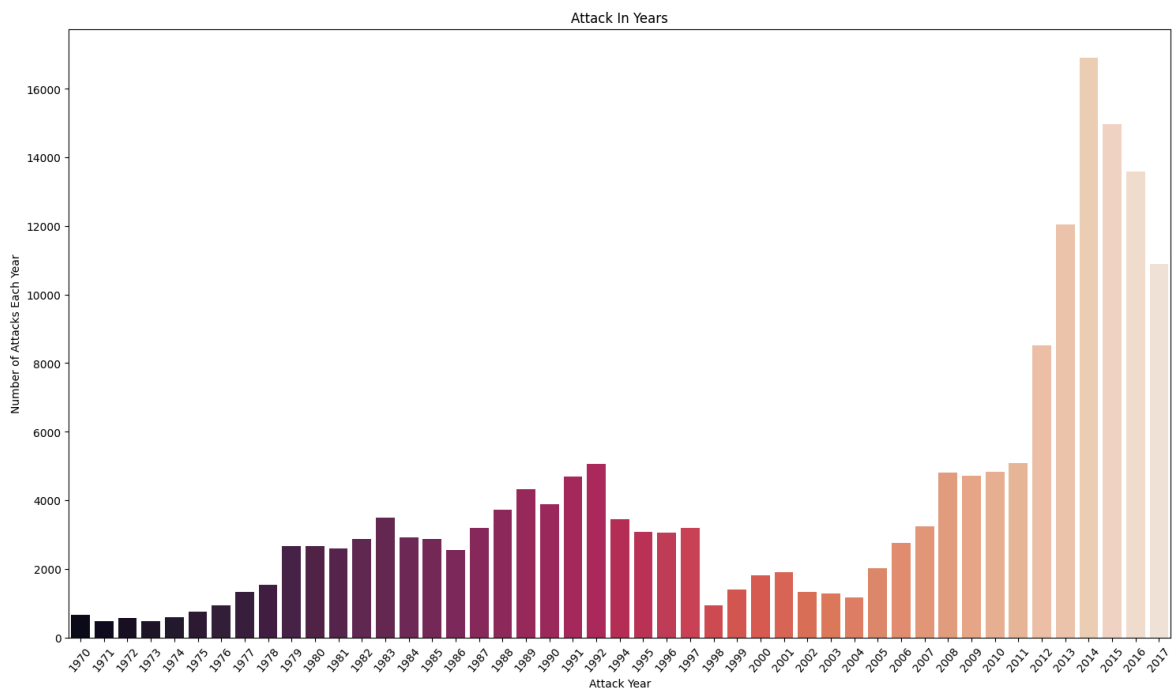


```
Out[ ]: 1970      651
        1971      471
        1972      568
        1973      473
        1974      581
        1975      740
        1976      923
        1977     1319
        1978     1526
        1979     2662
        1980     2662
        1981     2586
        1982     2544
        1983     2870
        1984     3495
        1985     2915
        1986     2860
        1987     3183
        1988     3721
        1989     4324
        1990     3887
        1991     4683
        1992     5071
        1994     3456
        1995     3081
        1996     3058
        1997     3197
        1998      934
        1999     1395
        2000     1814
        2001     1906
        2002     1333
        2003     1278
        2004     1166
        2005     2017
        2006     2758
        2007     3242
        2008     4805
        2009     4721
        2010     4826
        2011     5076
        2012     8522
        2013    12036
        2014    16903
        2015    14965
        2016    13587
        2017    10900
Name: Year, dtype: int64
```

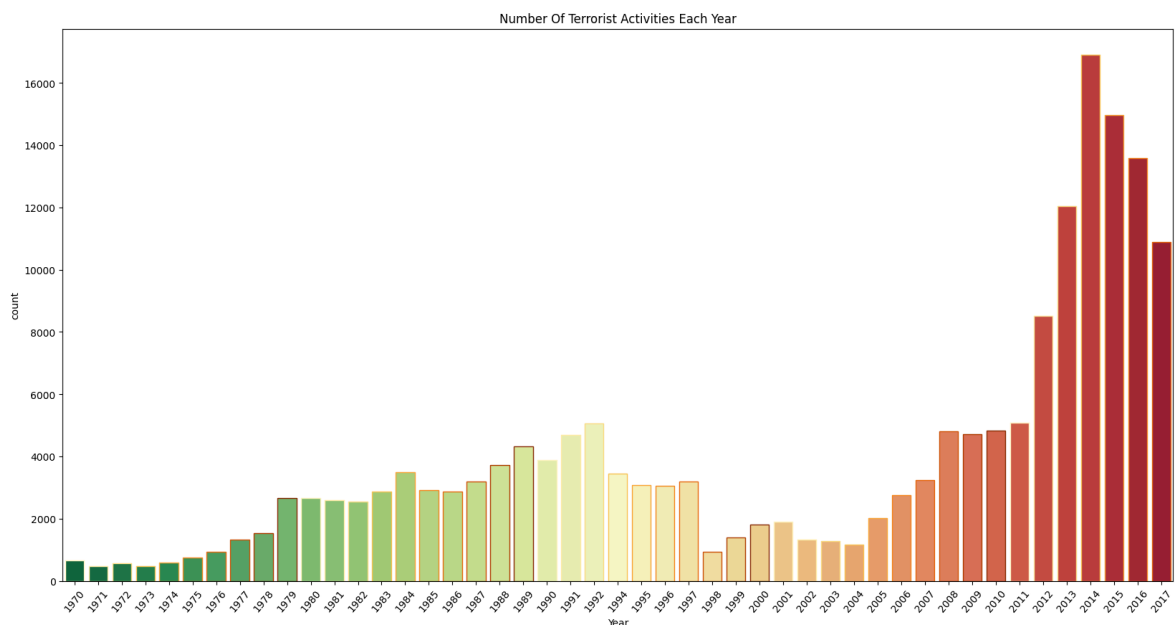
## Terrorist Activities Each Year

```
In [ ]: x_year = global_terror['Year'].unique()
y_count_years = global_terror['Year'].value_counts(dropna = False).sort_index()
plt.figure(figsize = (18,10))
sns.barplot(x = x_year,
            y = y_count_years,
            palette = 'rocket')
plt.xticks(rotation = 50)
```

```
plt.xlabel('Attack Year')
plt.ylabel('Number of Attacks Each Year')
plt.title('Attack In Years')
plt.show()
```

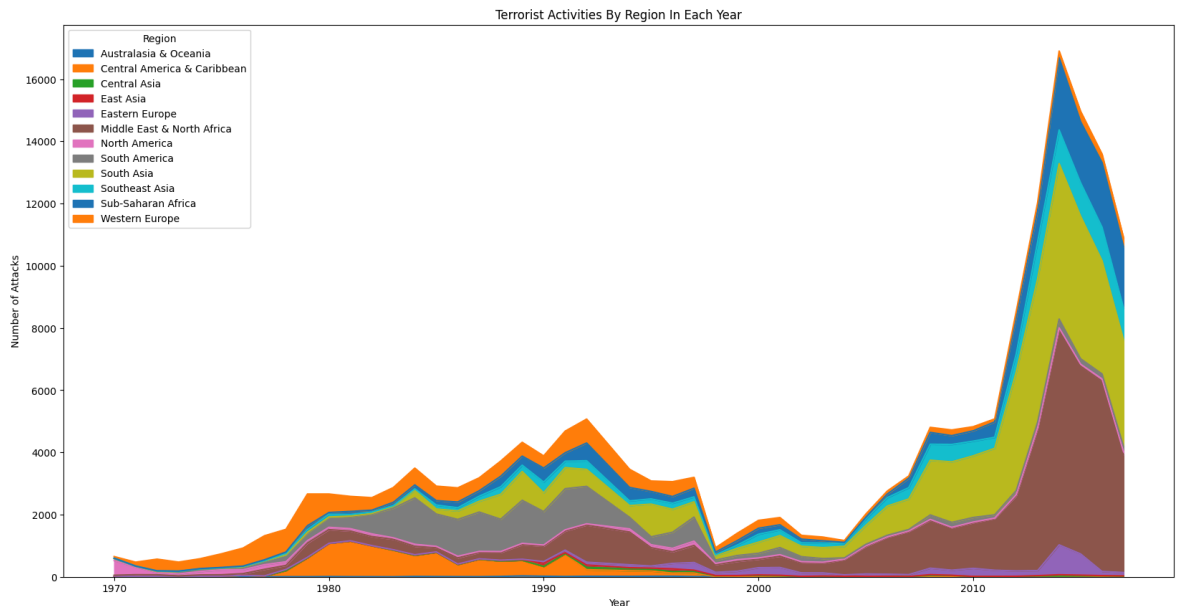


```
In [ ]: plt.subplots(figsize=(20,10))
sns.countplot(x='Year',data = global_terror, palette='RdYlGn_r',edgecolor=sns.co
plt.xticks(rotation=50)
plt.title('Number Of Terrorist Activities Each Year')
plt.show()
```



## Terrorist Activities By Region In Each Year

```
In [ ]: pd.crosstab(global_terror.Year, global_terror.Region).plot(kind='area',figsize=(
plt.title('Terrorist Activities By Region In Each Year')
plt.ylabel('Number of Attacks')
plt.show()
```



```
In [ ]: global_terror['Wounded'] = global_terror['Wounded'].fillna(0).astype(int)
global_terror['Killed'] = global_terror['Killed'].fillna(0).astype(int)
global_terror['Casualties'] = global_terror['Killed'] + global_terror['Wounded']
```

```
In [ ]: # Top 50 worst terrorist attacks
global_terror1 = global_terror.sort_values(by='Casualties',ascending=False)[:50]
```

```
In [ ]: heat=global_terror1.pivot_table(index='Country',columns='Year',values='Casualti
heat.fillna(0,inplace=True)
```

```
In [ ]: heat.head()
```

```
Out[ ]:      Year  1982  1984  1987  1992  1994  1995  1996  1997  1998  2001  ...  2005
```

Country													
<b>Afghanistan</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	...	0.0	
<b>Algeria</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	450.0	0.0	0.0	...	0.0	
<b>Chad</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	...	0.0	
<b>Egypt</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	...	0.0	
<b>Ethiopia</b>	0.0	0.0	0.0	500.0	0.0	0.0	0.0	0.0	0.0	0.0	...	0.0	

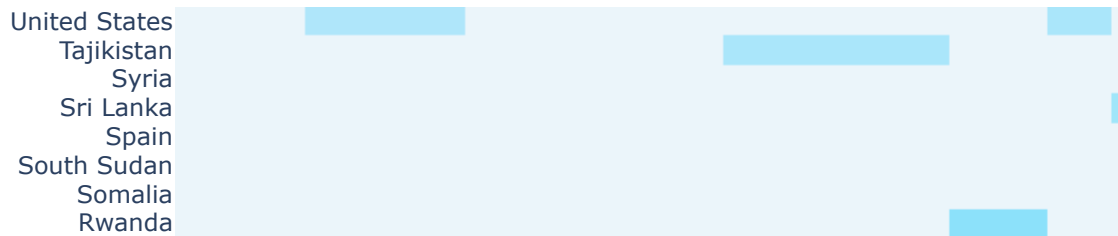
5 rows × 21 columns

```
In [ ]: import plotly.offline as py
py.init_notebook_mode(connected=True)
import plotly.graph_objs as go
colorscale = [[0, '#edf8fb'], [.3, '#00BFFF'], [.6, '#8856a7'], [1, '#810f7c']]
heatmap = go.Heatmap(z=heat.values, x=heat.columns, y=heat.index, colorscale=col
data = [heatmap]
layout = go.Layout(
    title='Top 50 Worst Terror Attacks in History from 1982 to 2017',
    xaxis = dict(ticks='', nticks=20),
    yaxis = dict(ticks='')
)
```



```
fig = go.Figure(data=data, layout=layout)
py.iplot(fig, filename='heatmap', show_link=False)
```

## Top 50 Worst Terror Attacks in History from 1982 to 2017

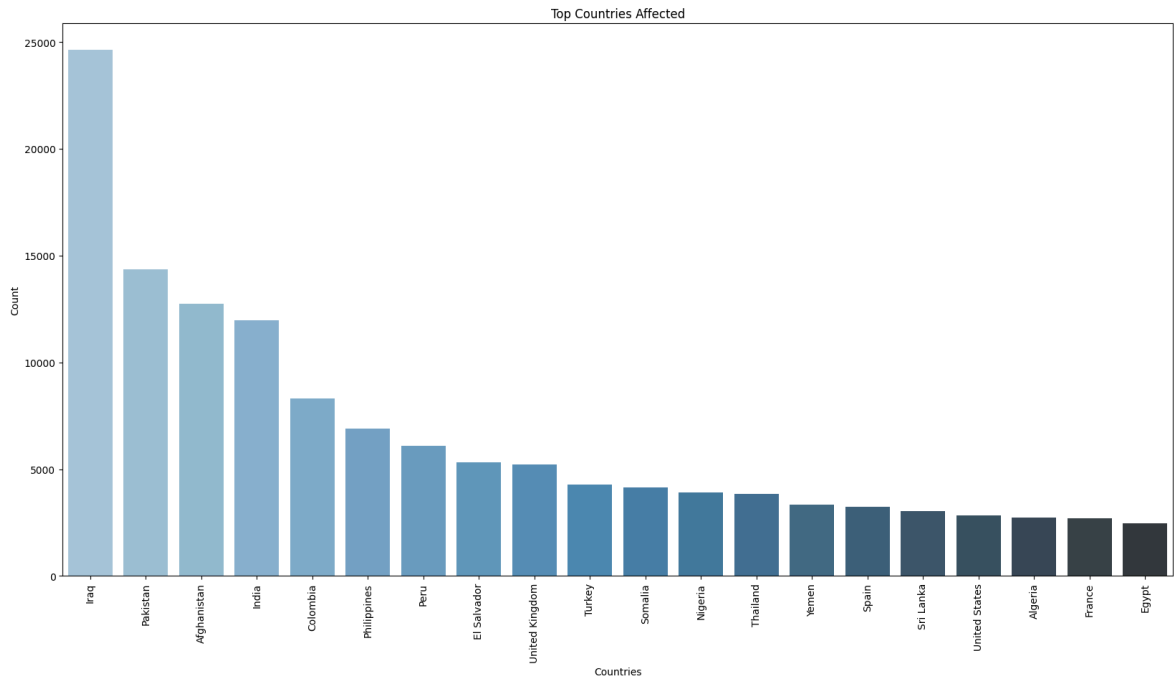


```
In [ ]: global_terror.Country.value_counts()[:21]
```

```
Out[ ]: Iraq                24636
Pakistan                14368
Afghanistan             12731
India                   11960
Colombia                 8306
Philippines             6908
Peru                    6096
El Salvador             5320
United Kingdom          5235
Turkey                  4292
Somalia                 4142
Nigeria                 3907
Thailand                 3849
Yemen                   3347
Spain                   3249
Sri Lanka               3022
United States           2836
Algeria                 2743
France                  2693
Egypt                   2479
Lebanon                 2478
Name: Country, dtype: int64
```

# Top Countries Affected By Terrorist Attacks

```
In [ ]: plt.subplots(figsize=(20,10))
sns.barplot(x=global_terror['Country'].value_counts()[:20].index,
            y=global_terror['Country'].value_counts()[:20].values,
            palette='Blues_d')
plt.title('Top Countries Affected')
plt.xlabel('Countries')
plt.ylabel('Count')
plt.xticks(rotation=90)
plt.show()
```



## ANALYSIS ON CUSTOMIZED DATA

### Terrorist Attacks of a Particular year and their Locations

Let's look at the terrorist acts in the world over a certain year.

```
In [ ]: import folium
from folium.plugins import MarkerCluster
```

```
In [ ]: filterYear = global_terror['Year'] == 2001
```

```
In [ ]: filterData = global_terror[filterYear] # filter data
# filterData.info()
reqFilterData = filterData.loc[:, 'city': 'longitude'] # get the required fields
reqFilterData = reqFilterData.dropna() # drop NaN values in latitude and longitude
reqFilterDataList = reqFilterData.values.tolist()
# reqFilterDataList
```

```
In [ ]: map = folium.Map(location = [0, 50], tiles='CartoDB positron', zoom_start=2)
markerCluster = folium.plugins.MarkerCluster().add_to(map)
for point in range(0, len(reqFilterDataList)):
    folium.Marker(location=reqFilterDataList[point][1], reqFilterDataList[point]
```

```
map = reqFilterDataList[point][0]].add_to(markerCluster)
```

Out[ ]:



From the above map, we can depict that the maximum attacks carried out in the year 2001 was on the African Continent, almost 1325 attacks. Then, the continent South America faced the highest number of attacks, i.e. 258.

## Terrorist's Organizations Operations In Each Country

```
In [ ]: global_terror.Group.value_counts()[1:20]
```

```
Out[ ]: Taliban 7478
Islamic State of Iraq and the Levant (ISIL) 5613
Shining Path (SL) 4555
Farabundo Marti National Liberation Front (FMLN) 3351
Al-Shabaab 3288
New People's Army (NPA) 2772
Irish Republican Army (IRA) 2671
Revolutionary Armed Forces of Colombia (FARC) 2487
Boko Haram 2418
Kurdistan Workers' Party (PKK) 2310
Basque Fatherland and Freedom (ETA) 2024
Communist Party of India - Maoist (CPI-Maoist) 1878
Maoists 1630
Liberation Tigers of Tamil Eelam (LTTE) 1606
National Liberation Army of Colombia (ELN) 1561
Tehrik-i-Taliban Pakistan (TTP) 1351
Palestinians 1125
Houthi extremists (Ansar Allah) 1062
Al-Qaida in the Arabian Peninsula (AQAP) 1020
Name: Group, dtype: int64
```

```
In [ ]: test = global_terror[global_terror.Group.isin(['Shining Path (SL)', 'Taliban', 'Is
```

```
In [ ]: test.Country.unique()
```

```
Out[ ]: array(['Peru', 'Bolivia', 'Colombia', 'Argentina', 'Brazil', 'Mexico',
               'Afghanistan', 'Pakistan', 'Syria', 'Iraq', 'Turkey', 'Tunisia',
               'Lebanon', 'Turkmenistan', 'Israel', 'Belgium', 'Egypt', 'Libya',
               'Saudi Arabia', 'West Bank and Gaza Strip', 'France', 'Bahrain',
               'Jordan', 'Somalia', 'Germany', 'Yemen', 'Philippines', 'Malaysia',
               'Indonesia', 'Russia', 'Georgia', 'United Kingdom', 'Iran',
               'Australia'], dtype=object)
```

```
In [ ]: global_terror_df_group = global_terror.dropna(subset=['latitude','longitude'])
```

```
In [ ]: global_terror_df_group = global_terror_df_group.drop_duplicates(subset=['Country'])
```

```
In [ ]: terrorist_groups = global_terror.Group.value_counts()[1:8].index.tolist()
global_terror_df_group = global_terror_df_group.loc[global_terror_df_group.Group.isin(terrorist_groups)]
print(global_terror_df_group.Group.unique())
```

```
["New People's Army (NPA)" 'Irish Republican Army (IRA)'
 'Shining Path (SL)' 'Farabundo Marti National Liberation Front (FMLN)'
 'Taliban' 'Al-Shabaab' 'Islamic State of Iraq and the Levant (ISIL)']
```

```
In [ ]: map = folium.Map(location=[50, 0], tiles="CartoDB positron", zoom_start=2)
markerCluster = folium.plugins.MarkerCluster().add_to(map)
for i in range(0, len(global_terror_df_group)):
    folium.Marker([global_terror_df_group.iloc[i]['latitude'], global_terror_df_group.iloc[i]['longitude']],
                  popup='Group: {}<br>Country: {}'.format(global_terror_df_group.iloc[i]['Group'], global_terror_df_group.iloc[i]['Country'])).add_to(map)
map
```

```
Out[ ]: Make this Notebook Trusted to load map: File -> Trust Notebook
```



```
In [ ]: m1 = folium.Map(location=[50, 0], tiles="CartoDB positron", zoom_start=2)
marker_cluster = MarkerCluster(
    name='clustered icons',
    overlay=True,
    control=False,
    icon_create_function=None
)
for i in range(0, len(global_terror_df_group)):
    marker = folium.Marker([global_terror_df_group.iloc[i]['latitude'], global_terror_df_group.iloc[i]['longitude']],
                          popup='Group: {}<br>Country: {}'.format(global_terror_df_group.iloc[i]['Group'], global_terror_df_group.iloc[i]['Country'])).add_to(m1)
marker_cluster.add_to(m1)
```

```

        folium.Popup(popup).add_to(marker)
        marker_cluster.add_child(marker)
    marker_cluster.add_to(m1)
    folium.TileLayer('openstreetmap').add_to(m1)
    #folium.TileLayer('Mapbox Bright').add_to(m1)
    folium.TileLayer('cartodbdark_matter').add_to(m1)
    folium.TileLayer('stamentoner').add_to(m1)
    folium.LayerControl().add_to(m1)

m1

```

Out [ ]: Make this Notebook Trusted to load map: File -> Trust Notebook



In [ ]: `global_terror.head()`

Out [ ]:

	Year	Month	Day	Country	state	Region	city	latitude	longitude
0	1970	7	2	Dominican Republic	NaN	Central America & Caribbean	Santo Domingo	18.456792	-69.951164
1	1970	0	0	Mexico	Federal	North America	Mexico city	19.371887	-99.086624
2	1970	1	0	Philippines	Tarlac	Southeast Asia	Unknown	15.478598	120.599741
3	1970	1	0	Greece	Attica	Western Europe	Athens	37.997490	23.762728
4	1970	1	0	Japan	Fukouka	East Asia	Fukouka	33.580412	130.396361

In [ ]: `# Total Number of people killed in terror attack`  
`killData = global_terror.loc[:, 'Killed']`  
`print('Number of people killed by terror attack:', int(sum(killData.dropna())))`

Number of people killed by terror attack: 411868

```
In [ ]: # Let's Look at what types of attacks these deaths were made of.
        attackData = global_terror.loc[:, 'AttackType']
        # attackData
        typeKillData = pd.concat([attackData, killData], axis=1)
```

```
In [ ]: typeKillData.head()
```

```
Out[ ]:
```

	AttackType	Killed
0	Assassination	1
1	Hostage Taking (Kidnapping)	0
2	Assassination	1
3	Bombing/Explosion	0
4	Facility/Infrastructure Attack	0

```
In [ ]: typeKillFormatData = typeKillData.pivot_table(columns='AttackType', values='Kill
        typeKillFormatData
```

```
Out[ ]:
```

	AttackType	Armed Assault	Assassination	Bombing/Explosion	Facility/Infrastructure Attack	Hijacking
	Killed	160297	24920	157321	3642	3718

```
In [ ]: typeKillFormatData.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Index: 1 entries, Killed to Killed
Data columns (total 9 columns):
#   Column                                Non-Null Count  Dtype
---  -
0   Armed Assault                        1 non-null     int32
1   Assassination                        1 non-null     int32
2   Bombing/Explosion                    1 non-null     int32
3   Facility/Infrastructure Attack       1 non-null     int32
4   Hijacking                           1 non-null     int32
5   Hostage Taking (Barricade Incident)  1 non-null     int32
6   Hostage Taking (Kidnapping)          1 non-null     int32
7   Unarmed Assault                      1 non-null     int32
8   Unknown                             1 non-null     int32
dtypes: int32(9)
memory usage: 152.0+ bytes
```

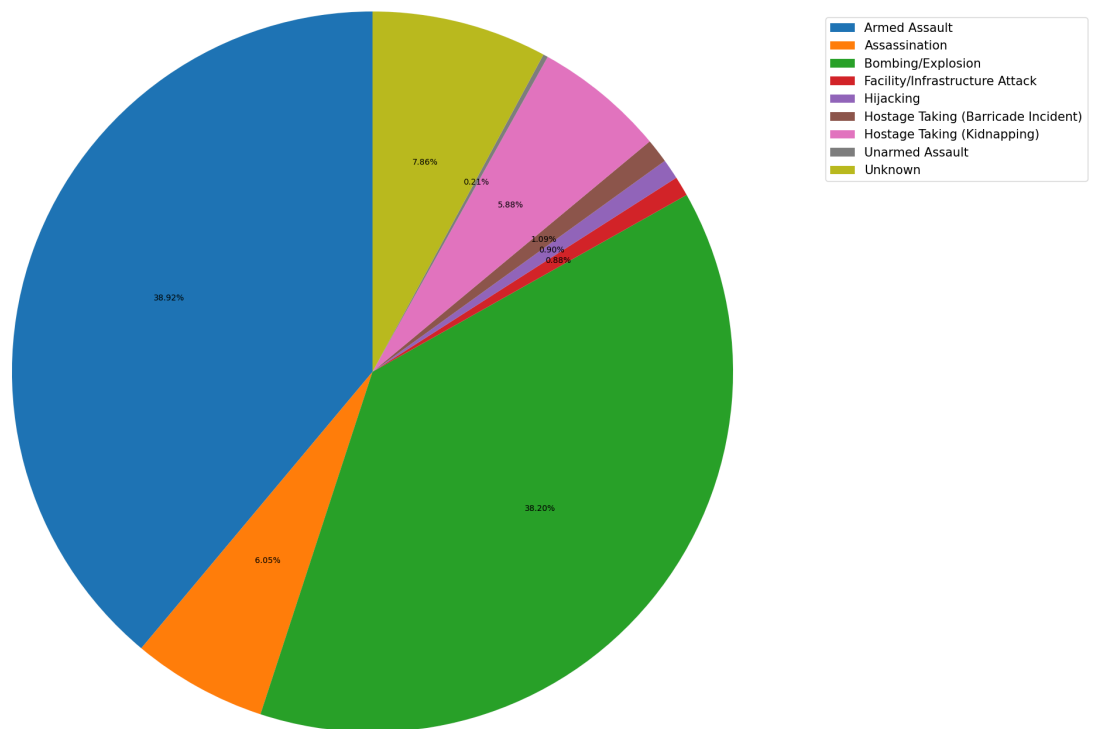
```
In [ ]: import matplotlib.pyplot as plt

        labels = typeKillFormatData.columns.tolist()
        transpose = typeKillFormatData.T
        values = transpose.values.flatten().tolist() # Flatten the 2D array to 1D

        fig, ax = plt.subplots(figsize=(20, 20), subplot_kw=dict(aspect="equal"))
        plt.pie(values, startangle=90, autopct='%.2f%%')
```

```
plt.title('Types Of Terrorist Attacks That Cause Deaths', fontsize=30)
plt.legend(labels, loc='upper right', bbox_to_anchor=(1.3, 0.9), fontsize=15)
plt.show()
```

Types Of Terrorist Attacks That Cause Deaths



```
In [ ]: global_terror.head(2)
```

```
Out[ ]:
```

	Year	Month	Day	Country	state	Region	city	latitude	longitude
0	1970	7	2	Dominican Republic	NaN	Central America & Caribbean	Santo Domingo	18.456792	-69.951164
1	1970	0	0	Mexico	Federal	North America	Mexico city	19.371887	-99.086624

```
In [ ]: # Number of Killed in Terrorist Attacks by Countries
countryData = global_terror.loc[:, 'Country']
# countryData
countryKillData = pd.concat([countryData, killData], axis=1)
```

```
In [ ]: countryKillFormatData = countryKillData.pivot_table(columns='Country', values='K
countryKillFormatData
```

Out[ ]:

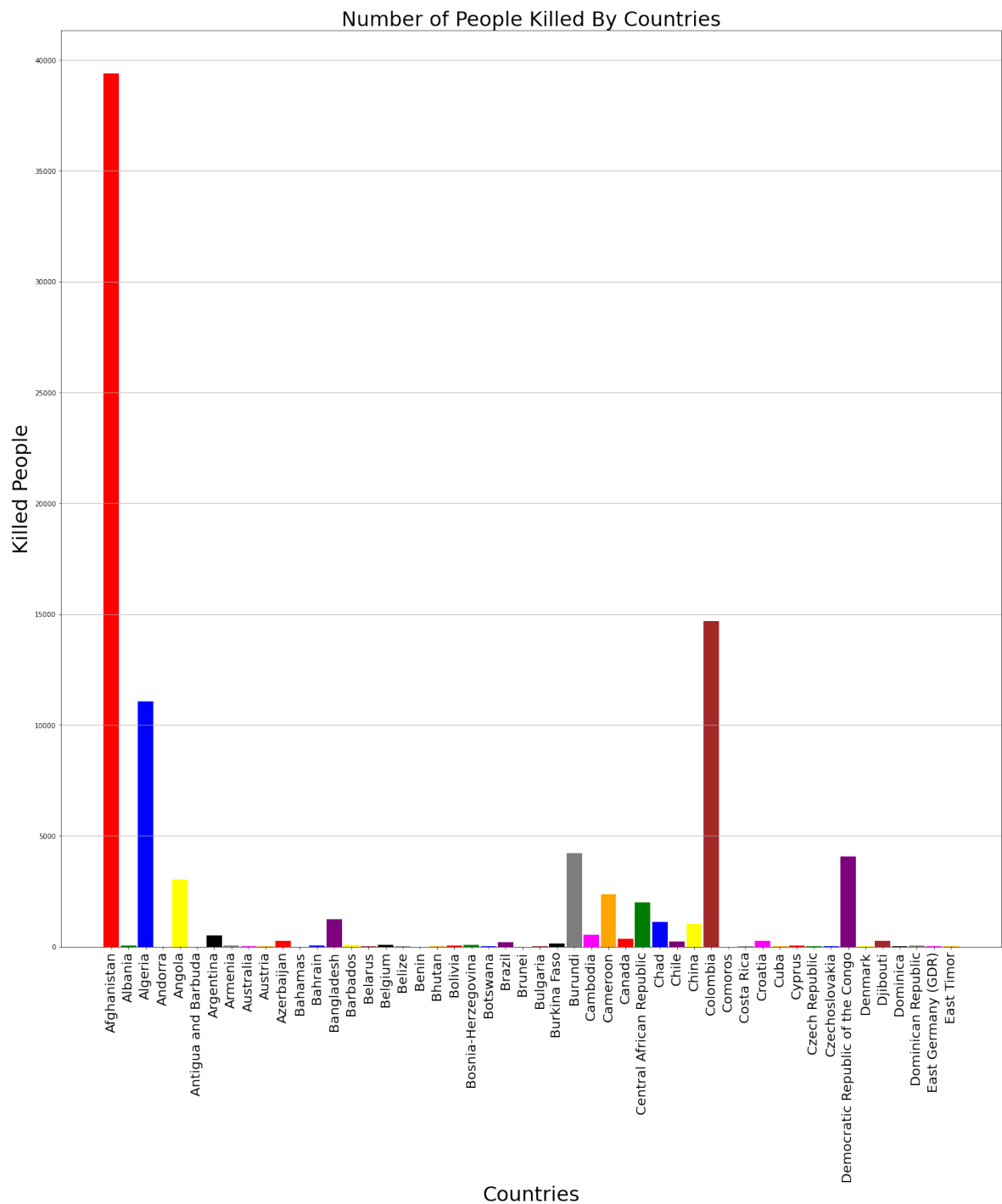
Country	Afghanistan	Albania	Algeria	Andorra	Angola	Antigua and Barbuda	Argentina	Armeni
Killed	39384	42	11066	0	3043	0	490	3

1 rows × 205 columns

```
In [ ]: fig_size = plt.rcParams["figure.figsize"]
fig_size[0]=25
fig_size[1]=25
plt.rcParams["figure.figsize"] = fig_size

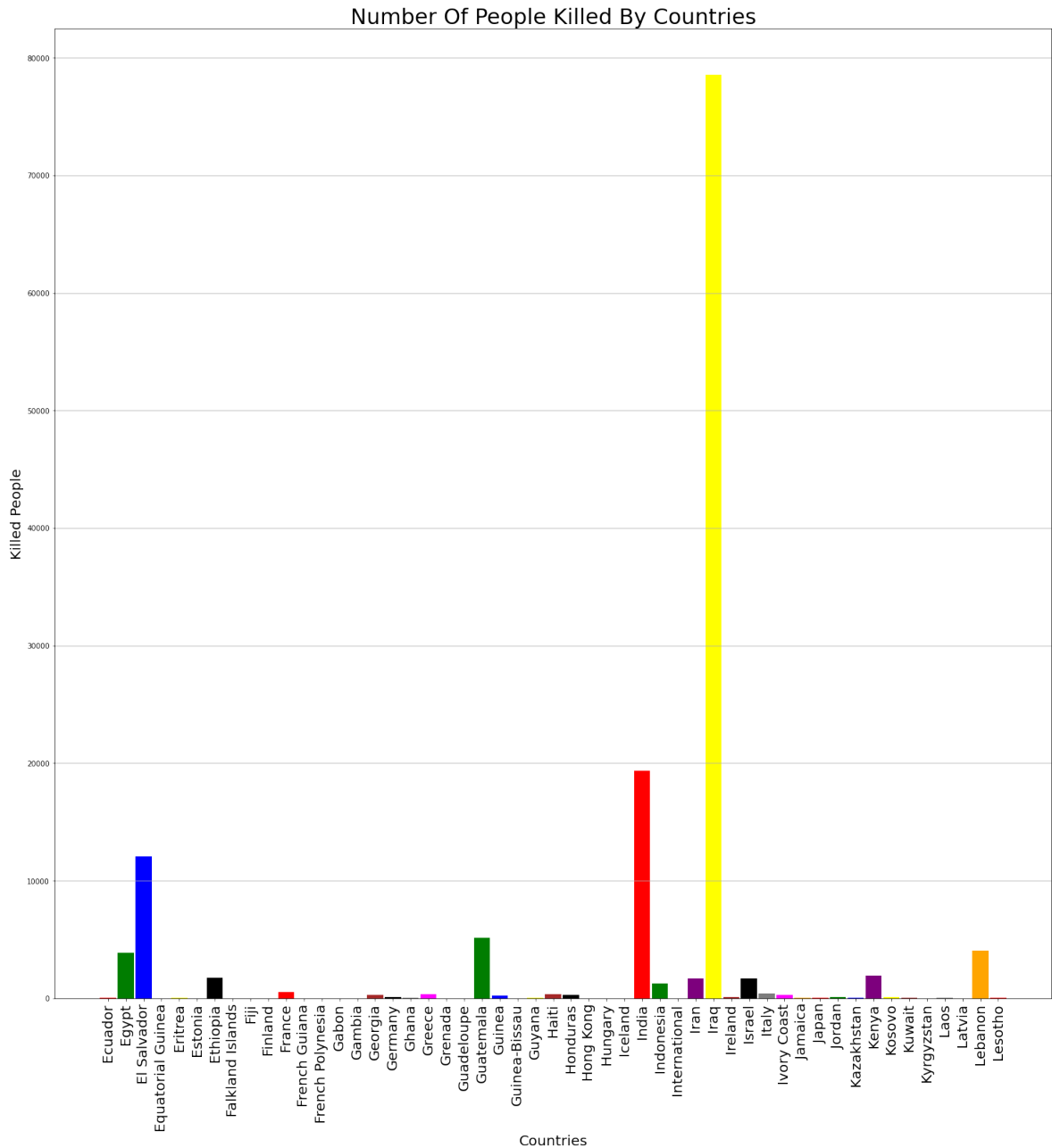
In [ ]: labels = countryKillFormatData.columns.tolist()
labels = labels[:50] #50 bar provides nice view
index = np.arange(len(labels))
transpose = countryKillFormatData.T
values = transpose.values.tolist()
values = values[:50]
values = [int(i[0]) for i in values] # convert float to int
colors = ['red', 'green', 'blue', 'purple', 'yellow', 'brown', 'black', 'gray',
fig, ax = plt.subplots(1, 1)
ax.yaxis.grid(True)
fig_size = plt.rcParams["figure.figsize"]
fig_size[0]=25
fig_size[1]=25
plt.rcParams["figure.figsize"] = fig_size
plt.bar(index, values, color = colors, width = 0.9)
plt.ylabel('Killed People', fontsize=30)
plt.xlabel('Countries', fontsize = 30)
plt.xticks(index, labels, fontsize=20, rotation=90)
plt.title('Number of People Killed By Countries', fontsize = 30)
# print(fig_size)
plt.show()
```





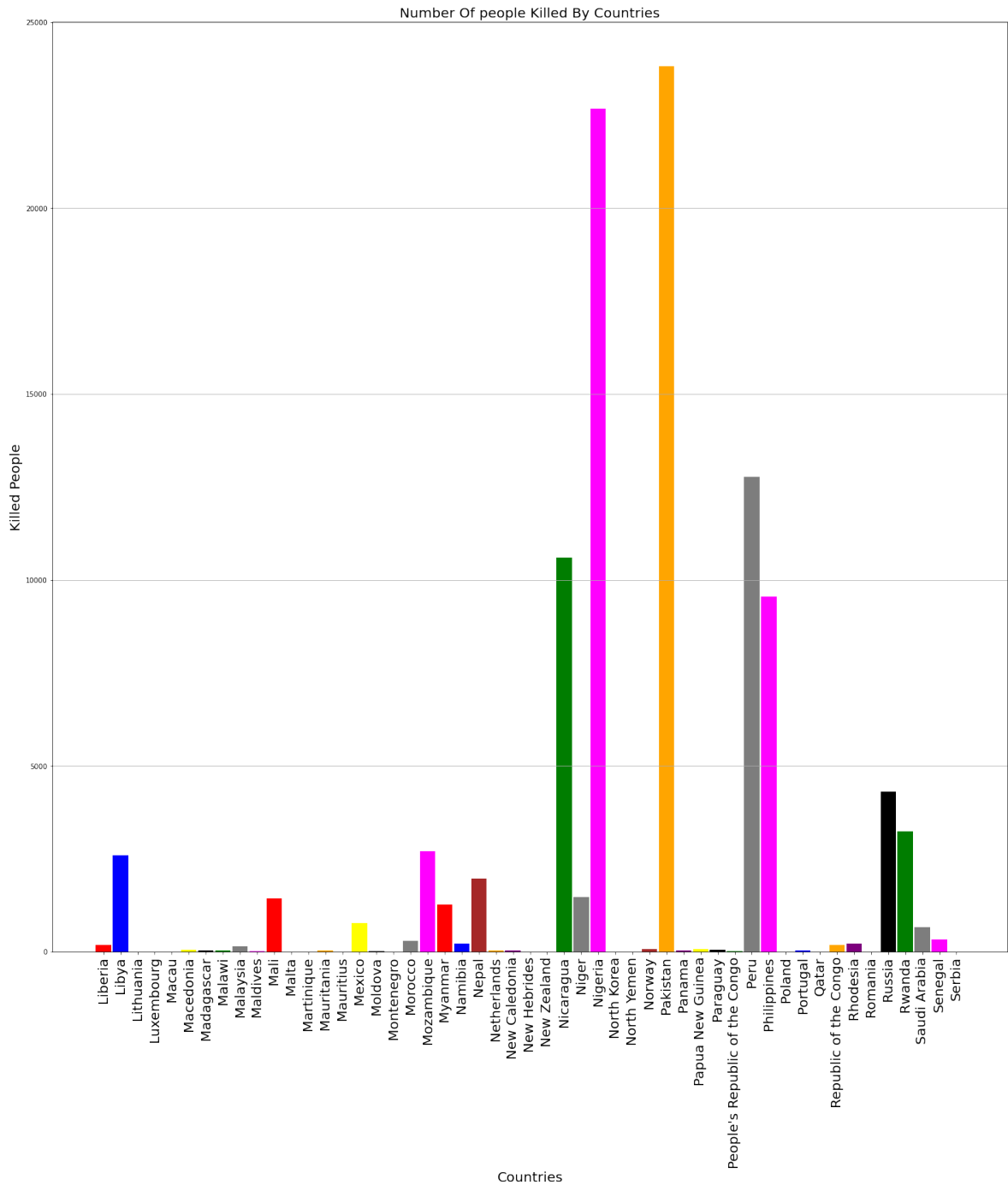
```
In [ ]: labels = countryKillFormatData.columns.tolist()
labels = labels[50:101]
index = np.arange(len(labels))
transpose = countryKillFormatData.T
values = transpose.values.tolist()
values = values[50:101]
values = [int(i[0]) for i in values]
colors = ['red', 'green', 'blue', 'purple', 'yellow', 'brown', 'black', 'gray',
fig, ax = plt.subplots(1, 1)
ax.yaxis.grid(True)
fig_size = plt.rcParams["figure.figsize"]
fig_size[0]=20
fig_size[1]=20
plt.rcParams["figure.figsize"] = fig_size
plt.bar(index, values, color = colors, width = 0.9)
plt.ylabel('Killed People', fontsize=20)
plt.xlabel('Countries', fontsize = 20)
```

```
plt.xticks(index, labels, fontsize=20, rotation=90)
plt.title('Number Of People Killed By Countries', fontsize = 30)
plt.show()
```



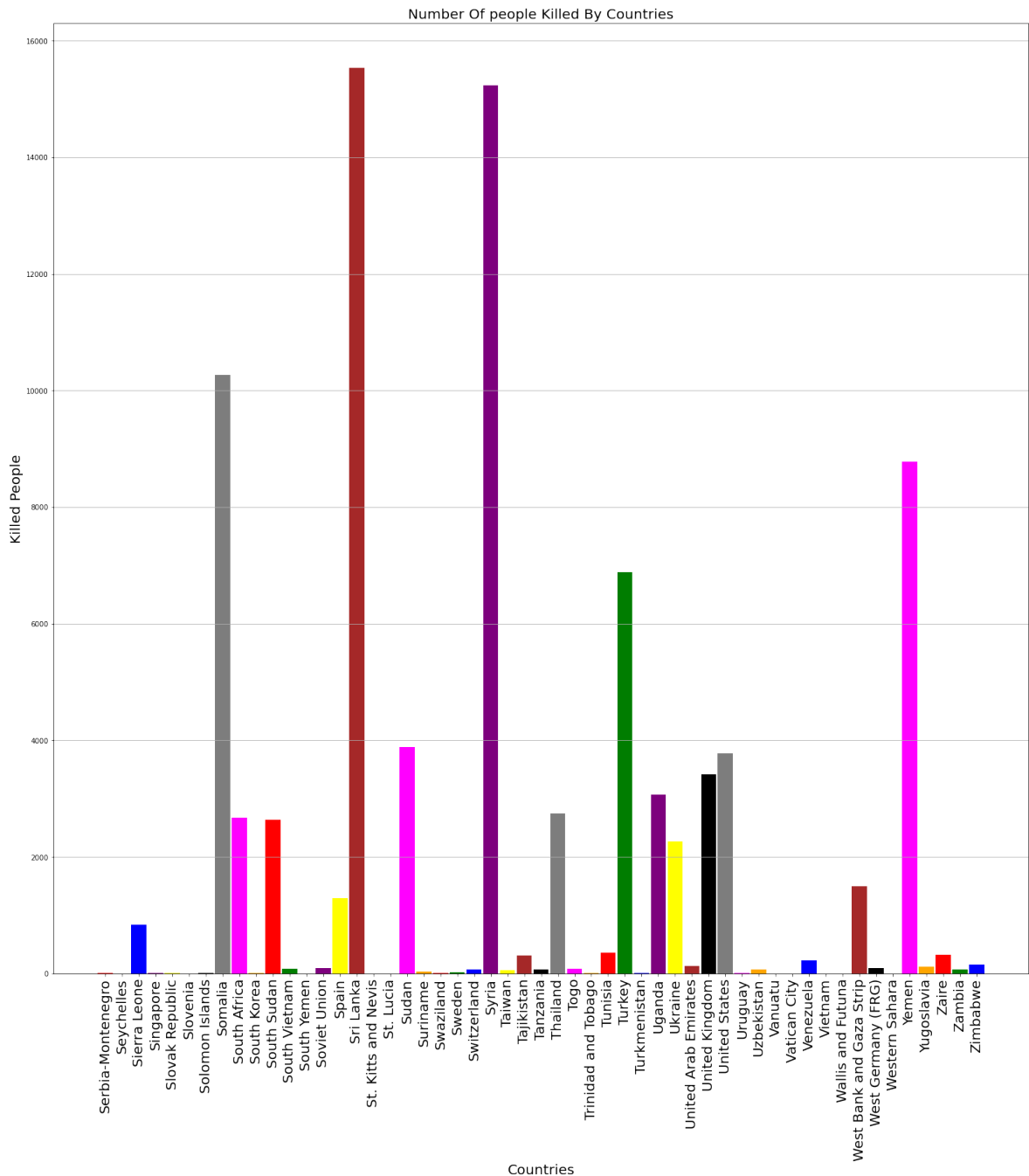
```
In [ ]: labels = countryKillFormatData.columns.tolist()
labels = labels[101:152]
index = np.arange(len(labels))
transpose = countryKillFormatData.T
values = transpose.values.tolist()
values = values[101:152]
values = [int(i[0]) for i in values]
colors = ['red', 'blue', 'brown', 'orange', 'purple', 'yellow', 'black', 'green']
fig, ax = plt.subplots(1, 1)
ax.yaxis.grid(True)
fig_size = plt.rcParams["figure.figsize"]
fig_size[0]=25
fig_size[1]=25
plt.rcParams["figure.figsize"] = fig_size
plt.bar(index, values, color = colors, width = 0.9)
plt.ylabel('Killed People', fontsize=20)
plt.xlabel('Countries', fontsize = 20)
```

```
plt.xticks(index, labels, fontsize=20, rotation=90)
plt.title('Number Of people Killed By Countries', fontsize = 20)
plt.show()
```



```
In [ ]: labels = countryKillFormatData.columns.tolist()
labels = labels[152:206]
index = np.arange(len(labels))
transpose = countryKillFormatData.T
values = transpose.values.tolist()
values = values[152:206]
values = [int(i[0]) for i in values]
colors = ['red', 'green', 'blue', 'purple', 'yellow', 'brown', 'black', 'gray',
fig, ax = plt.subplots(1, 1)
ax.yaxis.grid(True)
fig_size = plt.rcParams["figure.figsize"]
fig_size[0]=25
fig_size[1]=25
plt.rcParams["figure.figsize"] = fig_size
```

```
plt.bar(index, values, color = colors, width = 0.9)
plt.ylabel('Killed People', fontsize=20)
plt.xlabel('Countries', fontsize = 20)
plt.xticks(index, labels, fontsize=20, rotation=90)
plt.title('Number Of people Killed By Countries', fontsize = 20)
plt.show()
```



## CONCLUSIONS :

From the above graphs, we can see that the countries where most people are killed are : Afghanistan, Columbia, Iran, Sri lanka, Syria, Somalia, Yemen naming a few. Even though there is a perception that Muslims are supporters of terrorism, but Muslims are the people who are most damaged by terrorist attacks.

**So after different type of analyzation ,Overall terrorism is suddenly increased from 2010 and I have ranked the Hot zone in terms of terrorist activities in all regions -**

**#Middle East & North Africa**

## **Iraq**

Overall having highest Number of terrorist rate and sudden increase in terrorist activity after year 2010

## **Libya**

Overall having low terrorism activity, Second Highest in terms of successful terrorist activities which takes place in this country and an increased in terrorism rate after 2010.

## **Yemen**

Overall having low terrorism activity, Third Highest in terms of successful terrorist activities which takes place in this country and an increased in terrorism rate after 2010.

## **#South Asia**

### **Afghanistan**

Overall having 1st Highest terrorist rates and 1st highest in terms of extended terrorist rates and a very high increase in terrorism rate after 2010.

### **Pakistan**

Overall having 2nd highest terrorist rates but there is a good decrease in terrorist rates if we consider the 20s century and an increase in terrorism rate after 2010 but not as that of increase like Afghanistan and India.

### **India**

Overall having 3rd highest terrorist rates but if we consider extended terrorist rate so this country is 2nd highest and a very high increase in terrorism rate after 2010.

## **#Sub-Saharan Africa**

### **Nigeria**

Overall having low terrorism activity but 1st Highest in terms of extended terrorist activities which takes place in this country and 2nd in terms of increased of terrorism rate after 2010.

### **Somalia**

Overall having low terrorism activity but 2nd Highest in terms of extended terrorist activities which takes place in this country and 1st in terms of increased of terrorism rate after 2010.

### **Sudan**

Overall having low terrorism activity but 3rd Highest in terms of extended terrorist activities which takes place in this country and a bit increase in terrorism rate after 2010.

## **#Solution**

- **More security surveillance required at Iraq.**
- **Noticing the trends of terrorism activities , hugely populated regions suffer major kill ratios. This must be controlled with strict border rules**
- **Impose strict rules in controlling the explosions produce worldwide limiting the number of supplies #High alert at densly populated locations in each city as it is noticed that terrorists target is private citizens and property**

**Thank you!!**