

▼ Introduction

The Global Terrorism Database GTD is an open-source database including information on terrorist attacks around the world from 1970 through 2019. The GTD includes systematic data on domestic as well as international terrorist incidents that have occurred during this time period and now includes more than 200,000 attacks. The database is maintained by researchers at the National Consortium for the Study of Terrorism and Responses to Terrorism START, headquartered at the University of Maryland.

1. The Global Terrorism Database (GTD) documents more than 190,000 international and domestic terrorist attacks that occurred worldwide since 1970. With details on various dimensions of each attack, the GTD familiarizes analysts, policymakers, scholars, and journalists with patterns of terrorism.
2. The GTD defines terrorist attacks as: The threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation.
3. For each GTD incident, information is available on the date and location of the incident, the weapons used and nature of the target, the number of casualties, and – when identifiable – the identity of the perpetrator.
4. Compared to most types of criminal violence, terrorism poses special data collection challenges. In response, there has been growing interest in open source terrorist event data bases. One of the major problems with these data bases in the past is that they have been limited to international events – those involving a national or group of nationals from one country attacking targets physically located in another country. Past research shows that domestic incidents greatly outnumber international incidents.

```
# import the necessary libraries
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
# allow matplotlib to plot inline with frontends like colab

from google.colab import drive
drive.mount('/content/drive')

Mounted at /content/drive

import pandas as pd
data = pd.read_csv('/content/drive/MyDrive/Global_Terrorism_Data.csv',encoding="ISO-8859-1")
data.head()
```

```
/usr/local/lib/python3.8/dist-packages/IPython/core/interactiveshell.py:3326: Dtype
exec(code_obj, self.user_global_ns, self.user_ns)
```

	eventid	iyear	imonth	iday	approxdate	extended	resolution	country	c
0	197000000001	1970	7	2	NaN	0	NaN	58	
1	197000000002	1970	0	0	NaN	0	NaN	130	
2	197001000001	1970	1	0	NaN	0	NaN	160	
3	197001000002	1970	1	0	NaN	0	NaN	78	
4	197001000003	1970	1	0	NaN	0	NaN	101	

5 rows × 135 columns



```
data.columns
```

```
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)
```

NOTE-Since it contains 135 columns. They have huge proportion in dataset and Learning them doesn't make any sense. So, we will rename the columns name for better understanding and then we will only extract necessary columns.

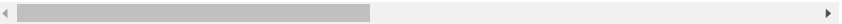
▼ Cleaning the Data

```
data.rename(columns={"iyear":"year","imonth":"Month","iday":"Day","country_txt":"Country",
                    "region_txt":"Region","provstate":"Province/State","city":"City",
                    "latitude":"Latitude","longitude":"Longitude","location":"Location",
                    "summary":"Summary","attacktype1_txt":"Attack Type","targtype1_txt":"Target Type",
                    "gname":"Group Name","motive":"Motive","weaptype1_txt":"Weapon Type",
                    "nkill":"Killed","nwound":"Wounded","addnotes":"Add Notes"},inplace=True)
```

```
data.head()
```

	eventid	year	Month	Day	approxdate	extended	resolution	country	Co
0	1970000000001	1970	7	2	NaN	0	NaN	58	Dom Re
1	1970000000002	1970	0	0	NaN	0	NaN	130	M
2	1970010000001	1970	1	0	NaN	0	NaN	160	Philip
3	1970010000002	1970	1	0	NaN	0	NaN	78	G
4	1970010000003	1970	1	0	NaN	0	NaN	101	.

5 rows × 135 columns



```
data.shape
```

(181691, 135)

```
data.isnull().sum()
```

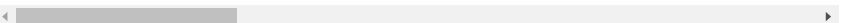
```
eventid      0
year         0
Month        0
Day          0
approxdate   172452
...
INT_LOG      0
INT_IDEO     0
INT_MISC     0
INT_ANY      0
related     156653
Length: 135, dtype: int64
```

```
data["Killed"]=data["Killed"].fillna(0)
data["Wounded"]=data["Wounded"].fillna(0)
data["Casualty"]=data["Killed"]+data["Wounded"]
```

```
data.describe()
```

	eventid	year	month	Day	extended	
count	1.816910e+05	181691.000000	181691.000000	181691.000000	181691.000000	181
mean	2.002705e+11	2002.638997	6.467277	15.505644	0.045346	
std	1.325957e+09	13.259430	3.388303	8.814045	0.208063	
min	1.970000e+11	1970.000000	0.000000	0.000000	0.000000	
25%	1.991021e+11	1991.000000	4.000000	8.000000	0.000000	
50%	2.009022e+11	2009.000000	6.000000	15.000000	0.000000	
75%	2.014081e+11	2014.000000	9.000000	23.000000	0.000000	
max	2.017123e+11	2017.000000	12.000000	31.000000	1.000000	1

8 rows × 78 columns



Observation

- 1. The data consists of terrorist activities ranging from the year: 1970 to 2017

2. Maximum number of total casualties in an event were: 9574
3. Maximum number of people killed in an event were: 1570
4. Maximum number of people wounded in an event were: 8191

▼ Visualizing the data

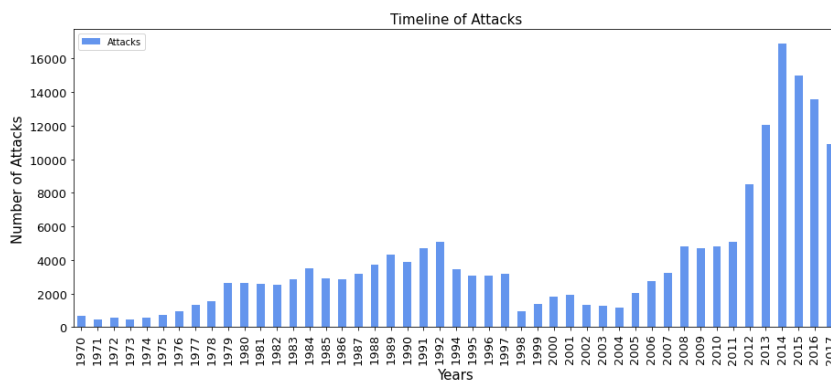
1. Year wise Attacks

1- Number of Attacks in each Year

```
attacks=data["year"].value_counts(dropna=False).sort_index().to_frame().reset_index().rename(columns={"index":"year","year":"Attacks"}).attacks.head()
```

Attacks	
year	
1970	651
1971	471
1972	568
1973	473
1974	581

```
attacks.plot(kind="bar",color="cornflowerblue",figsize=(15,6),fontsize=13)
plt.title("Timeline of Attacks",fontsize=15)
plt.xlabel("Years",fontsize=15)
plt.ylabel("Number of Attacks",fontsize=15)
plt.show()
```



- Maximum number of attacks(16903) in 2014
- Minimum number of attacks(471) in 1971

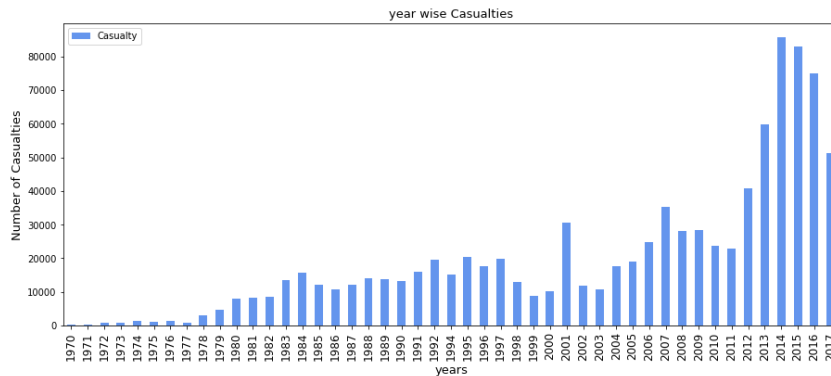
2-Total Casualties (Killed + Wounded) in each Year

```
yc=data[["year","Casualty"]].groupby("year").sum()
yc.head()
```

Casualty

year

```
yc.plot(kind="bar",color="cornflowerblue",figsize=(15,6))
plt.title("year wise Casualties",fontsize=13)
plt.xlabel("years",fontsize=13)
plt.xticks(fontsize=12)
plt.ylabel("Number of Casualties",fontsize=13)
plt.show()
```



Double-click (or enter) to edit

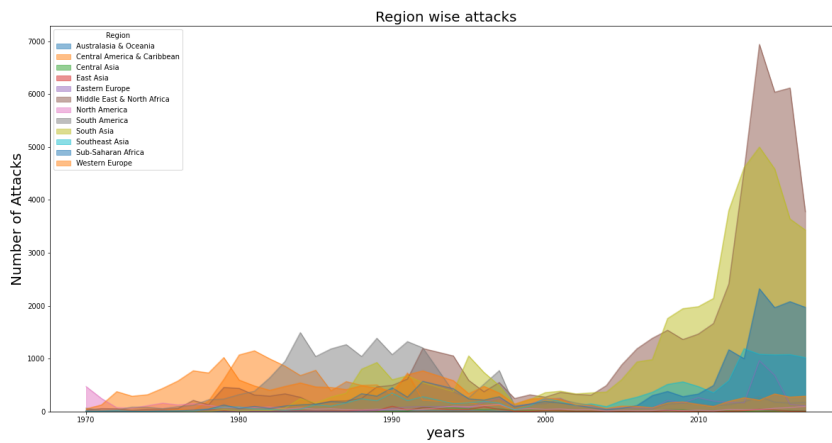
2. Region wise Attacks

1-Distribution of Terrorist Attacks over Regions from 1970-2017

```
reg=pd.crosstab(data.year,data.Region)
reg.head()
```

Region	Australasia & Oceania	Central America & Caribbean	Central Asia	East Asia	Eastern Europe	Middle East & North Africa	North America	South America
year								
1970	1	7	0	2	12	28	472	65
1971	1	5	0	1	5	55	247	24
1972	8	3	0	0	1	53	73	33
1973	1	6	0	2	1	19	64	83

```
reg.plot(kind="area", stacked=False, alpha=0.5,figsize=(20,10))
plt.title("Region wise attacks",fontsize=20)
plt.xlabel("years",fontsize=20)
plt.ylabel("Number of Attacks",fontsize=20)
plt.show()
```



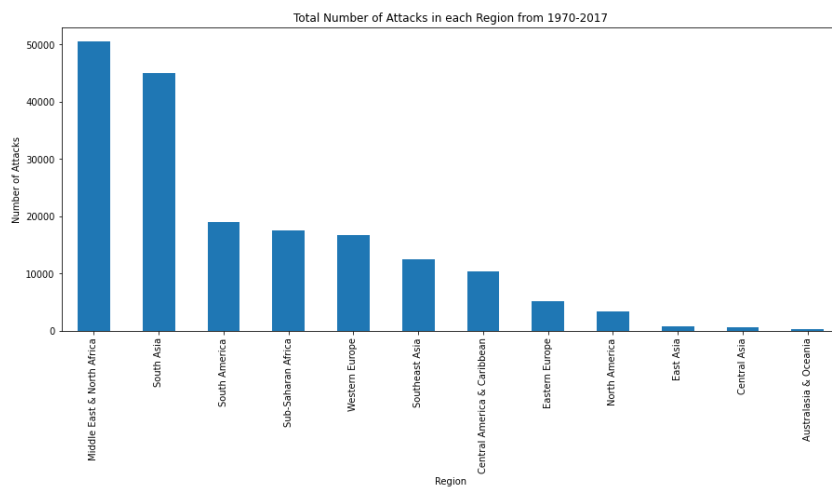
2-Total Terrorist Attacks in each Region from 1970-2017

```
regt=reg.transpose()
regt["Total"]=regt.sum(axis=1)
ra=regt["Total"].sort_values(ascending=False)
ra
```

Region	
Middle East & North Africa	50474
South Asia	44974
South America	18978
Sub-Saharan Africa	17550
Western Europe	16639
Southeast Asia	12485
Central America & Caribbean	10344
Eastern Europe	5144
North America	3456
East Asia	802
Central Asia	563
Australasia & Oceania	282

Name: Total, dtype: int64

```
ra.plot(kind="bar",figsize=(15,6))
plt.title("Total Number of Attacks in each Region from 1970-2017")
plt.xlabel("Region")
plt.ylabel("Number of Attacks")
plt.show()
```

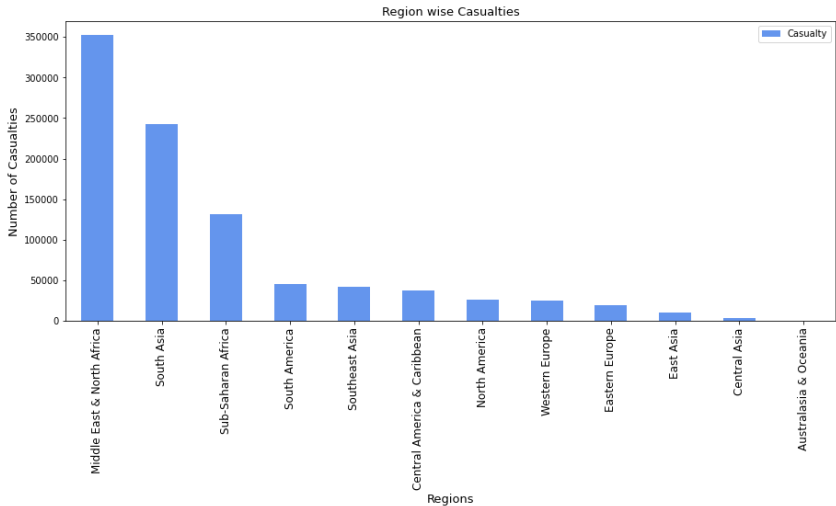


3-Total Casualties (Killed + Wounded) in each Region

```
rc=data[["Region", "Casualty"]].groupby("Region").sum().sort_values(by="Casualty",ascending=False)
rc
```

	Casualty
Region	
Middle East & North Africa	351950.0
South Asia	242679.0
Sub-Saharan Africa	131243.0
South America	45553.0
Southeast Asia	41896.0
Central America & Caribbean	37699.0
North America	26447.0
Western Europe	25026.0
Eastern Europe	19460.0
East Asia	10365.0
Central Asia	3009.0
Australasia & Oceania	410.0

```
rc.plot(kind="bar",color="cornflowerblue",figsize=(15,6))
plt.title("Region wise Casualties",fontsize=13)
plt.xlabel("Regions",fontsize=13)
plt.xticks(fontsize=12)
plt.ylabel("Number of Casualties",fontsize=13)
plt.show()
```



4-Killed in each Region

```
rk=data[["Region", "Killed"]].groupby("Region").sum().sort_values(by="Killed",ascending=False)
rk
```

	Killed
Region	
Middle East & North Africa	137642.0
South Asia	101319.0
Sub-Saharan Africa	78386.0
South America	28849.0
Central America & Caribbean	28708.0
Southeast Asia	15637.0

5-Wounded in each Region

Western Europe	6694.0
----------------	--------

```
rw=data[["Region", "Wounded"]].groupby("Region").sum().sort_values(by="Wounded", ascending=False)
rw
```

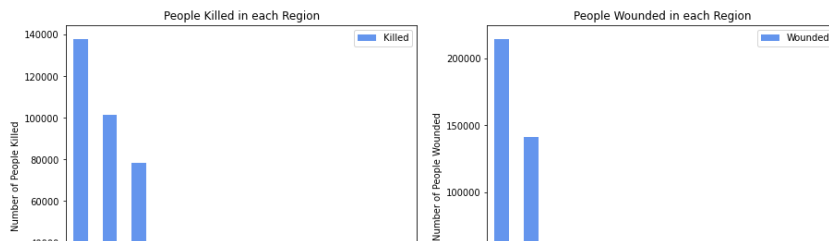
	Wounded
Region	
Middle East & North Africa	214308.0
South Asia	141360.0
Sub-Saharan Africa	52857.0
Southeast Asia	26259.0
North America	21531.0
Western Europe	18332.0
South America	16704.0
Eastern Europe	12045.0
East Asia	9213.0
Central America & Caribbean	8991.0
Central Asia	2009.0
Australasia & Oceania	260.0

```
fig=plt.figure()
ax0=fig.add_subplot(1,2,1)
ax1=fig.add_subplot(1,2,2)

#Killed
rk.plot(kind="bar",color="cornflowerblue",figsize=(15,6),ax=ax0)
ax0.set_title("People Killed in each Region")
ax0.set_xlabel("Regions")
ax0.set_ylabel("Number of People Killed")

#Wounded
rw.plot(kind="bar",color="cornflowerblue",figsize=(15,6),ax=ax1)
ax1.set_title("People Wounded in each Region")
ax1.set_xlabel("Regions")
ax1.set_ylabel("Number of People Wounded")

plt.show()
```



▼ 3. Country wise Attacks - Top 10

```

fric Asi fric fric xea Asi rop rop fric Asi Asi ani
1-Ea Su me jstr 1-Ea Su me jstr

1-Number of Attacks in Each Country

ct=data["Country"].value_counts().head(10)
ct

```

```

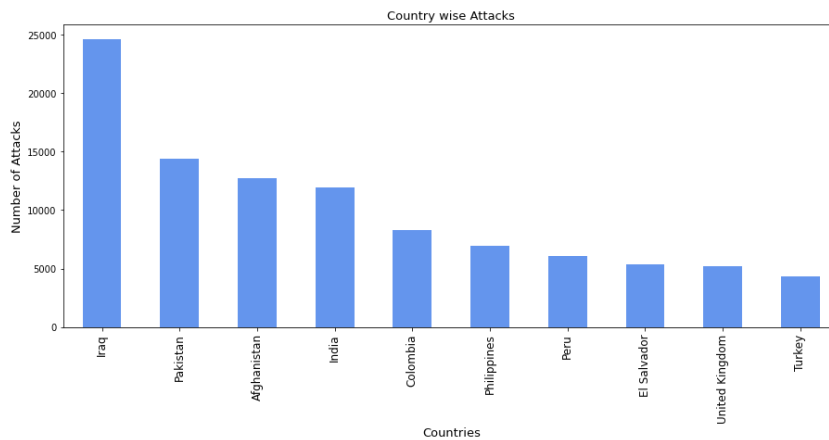
Iraq          24636
Pakistan      14368
Afghanistan   12731
India         11960
Colombia       8306
Philippines   6908
Peru          6096
El Salvador   5320
United Kingdom 5235
Turkey        4292
Name: Country, dtype: int64

```

```

ct.plot(kind="bar",color="cornflowerblue",figsize=(15,6))
plt.title("Country wise Attacks",fontsize=13)
plt.xlabel("Countries",fontsize=13)
plt.xticks(fontsize=12)
plt.ylabel("Number of Attacks",fontsize=13)
plt.show()

```



2-Total Casualties (Killed + Wounded) in each Country

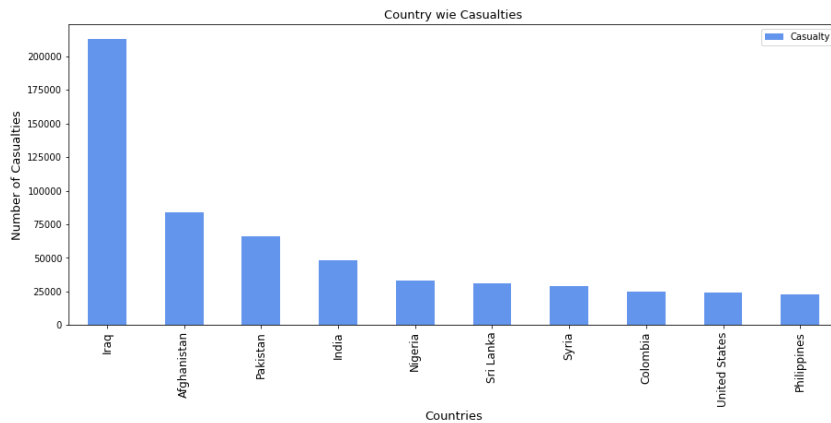
```

cnc=data[["Country","Casualty"]].groupby("Country").sum().sort_values(by="Casualty",ascending=False)
cnc.head(10)

```


Casualty	
Country	
Iraq	213279.0
Afghanistan	83661.0
Pakistan	65860.0
India	48321.0

```
cnc[:10].plot(kind="bar",color="cornflowerblue",figsize=(15,6))
plt.title("Country wie Casualties",fontsize=13)
plt.xlabel("Countries",fontsize=13)
plt.xticks(fontsize=12)
plt.ylabel("Number of Casualties",fontsize=13)
plt.show()
```



3-Killed in each Country

```
cnk=data[["Country","Killed"]].groupby("Country").sum().sort_values(by="Killed",ascending=False)
cnk.head(10)
```

Killed	
Country	
Iraq	78589.0
Afghanistan	39384.0
Pakistan	23822.0
Nigeria	22682.0
India	19341.0
Sri Lanka	15530.0
Syria	15229.0
Colombia	14698.0
Peru	12771.0
El Salvador	12053.0

4-Wounded in each Country

```
cnw=data[["Country","Wounded"]].groupby("Country").sum().sort_values(by="Wounded",ascending=False)
cnw.head(10)
```

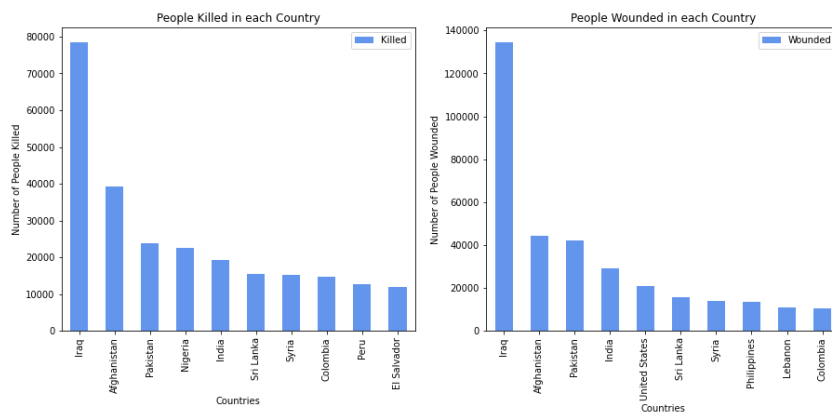
	Wounded
Country	
Iraq	134690.0
Afghanistan	44277.0
Pakistan	42038.0
India	28980.0
United States	20702.0
Sri Lanka	15561.0
Syria	14109.0

```
fig=plt.figure()
ax0=fig.add_subplot(1,2,1)
ax1=fig.add_subplot(1,2,2)

#Killed
cnk[:10].plot(kind="bar",color="cornflowerblue",figsize=(15,6),ax=ax0)
ax0.set_title("People Killed in each Country")
ax0.set_xlabel("Countries")
ax0.set_ylabel("Number of People Killed")

#Wounded
cnw[:10].plot(kind="bar",color="cornflowerblue",figsize=(15,6),ax=ax1)
ax1.set_title("People Wounded in each Country")
ax1.set_xlabel("Countries")
ax1.set_ylabel("Number of People Wounded")

plt.show()
```



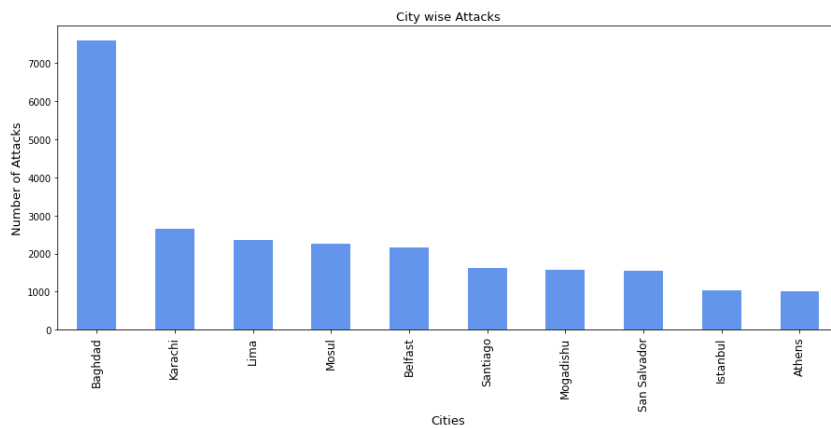
▼ 4. City wise Attacks - Top 10

1-Number of Attacks in each city

```
city=data["City"].value_counts()[1:11]
city
```

```
Baghdad      7589
Karachi      2652
Lima         2359
Mosul        2265
Belfast      2171
Santiago     1621
Mogadishu    1581
San Salvador 1558
Istanbul     1048
Athens       1019
Name: City, dtype: int64
```

```
city.plot(kind="bar",color="cornflowerblue",figsize=(15,6))
plt.title("City wise Attacks",fontsize=13)
plt.xlabel("Cities",fontsize=13)
plt.xticks(fontsize=12)
plt.ylabel("Number of Attacks",fontsize=13)
plt.show()
```

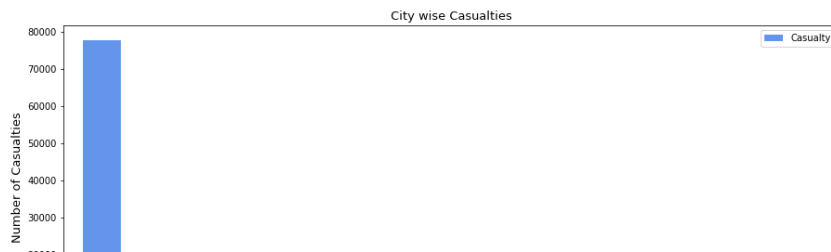


2-Total Casualties (Killed + Wounded) in each City

```
cc=data[["City","Casualty"]].groupby("City").sum().sort_values(by="Casualty",ascending=False).drop("Unknown")
cc.head(10)
```

Casualty	
City	
Baghdad	77876.0
New York City	19619.0
Mosul	12927.0
Karachi	9376.0
Mogadishu	8868.0
Kabul	8466.0
Beirut	7257.0
Kirkuk	6636.0
Colombo	5906.0
Aleppo	5748.0

```
cc[:10].plot(kind="bar",color="cornflowerblue",figsize=(15,6))
plt.title("City wise Casualties",fontsize=13)
plt.xlabel("Cities",fontsize=13)
plt.xticks(fontsize=12)
plt.ylabel("Number of Casualties",fontsize=13)
plt.show()
```



3-Killed in each City



```
ck=data[["City","Killed"]].groupby("City").sum().sort_values(by="Killed",ascending=False).drop("Unknown")
ck.head(10)
```

Killed	
City	
Baghdad	21151.0
Mosul	7140.0
Mogadishu	3913.0
Karachi	3688.0
New York City	2838.0
Tikrit	2679.0
Kabul	2493.0
Ramadi	2313.0
Maiduguri	2235.0
Aleppo	2125.0

4-Wounded in each City

```
cw=data[["City","Wounded"]].groupby("City").sum().sort_values(by="Wounded",ascending=False).drop("Unknown")
cw.head(10)
```

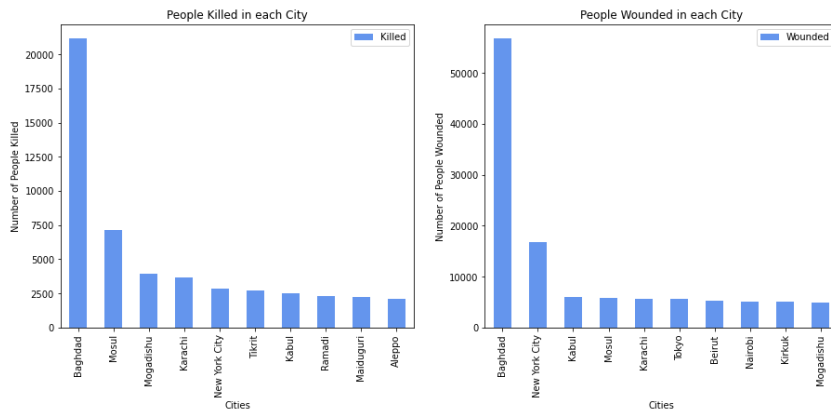
Wounded	
City	
Baghdad	56725.0
New York City	16781.0
Kabul	5973.0
Mosul	5787.0
Karachi	5688.0
Tokyo	5542.0
Beirut	5341.0
Nairobi	5024.0
Kirkuk	5008.0
Mogadishu	4955.0

```
fig=plt.figure()
ax0=fig.add_subplot(1,2,1)
ax1=fig.add_subplot(1,2,2)

#Killed
ck[:10].plot(kind="bar",color="cornflowerblue",figsize=(15,6),ax=ax0)
ax0.set_title("People Killed in each City")
ax0.set_xlabel("Cities")
ax0.set_ylabel("Number of People Killed")

#Wounded
cw[:10].plot(kind="bar",color="cornflowerblue",figsize=(15,6),ax=ax1)
ax1.set_title("People Wounded in each City")
ax1.set_xlabel("Cities")
ax1.set_ylabel("Number of People Wounded")

plt.show()
```



5. Target Type wise Attacks

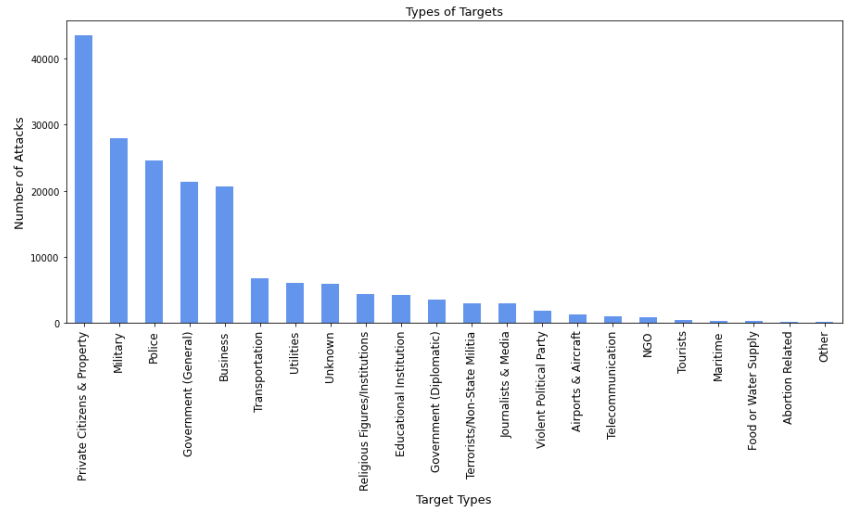
1-Number of Attacks over each Target Type

```
ta=data["Target Type"].value_counts()
ta
```

Private Citizens & Property	43511
Military	27984
Police	24506
Government (General)	21283
Business	20669
Transportation	6799
Utilities	6023
Unknown	5898
Religious Figures/Institutions	4440
Educational Institution	4322
Government (Diplomatic)	3573
Terrorists/Non-State Militia	3039
Journalists & Media	2948
Violent Political Party	1866
Airports & Aircraft	1343
Telecommunication	1009
NGO	970
Tourists	440
Maritime	351
Food or Water Supply	317
Abortion Related	263
Other	137

Name: Target Type, dtype: int64

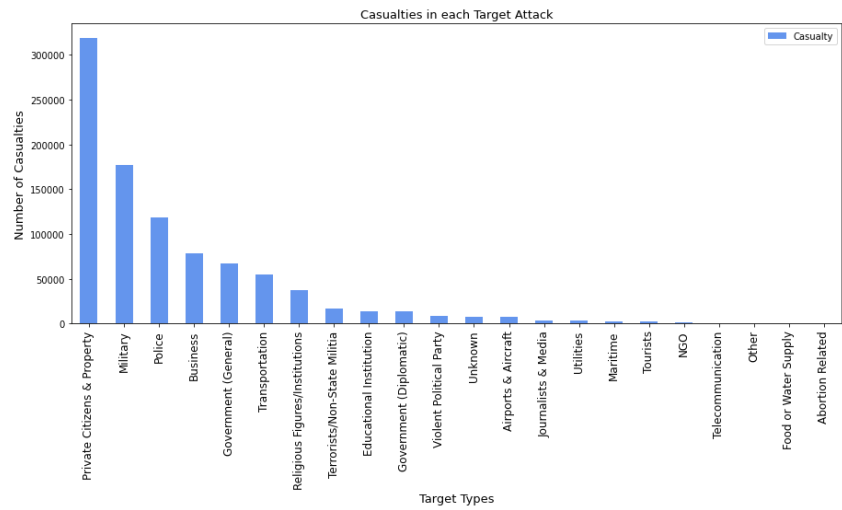
```
ta.plot(kind="bar",color="cornflowerblue",figsize=(15,6))
plt.title("Types of Targets",fontsize=13)
plt.xlabel("Target Types",fontsize=13)
plt.xticks(fontsize=12)
plt.ylabel("Number of Attacks",fontsize=13)
plt.show()
```



```
tc=data[["Target Type","Casualty"]].groupby("Target Type").sum().sort_values(by="Casualty",ascending=False)
tc
```

Casualty	
Target Type	
Private Citizens & Property	319176.0
Military	177085.0
Police	118407.0
Business	78018.0
Government (General)	67255.0
Transportation	54595.0
Religious Figures/Institutions	37890.0
Terrorists/Non-State Militia	17311.0
Educational Institution	13972.0
Government (Diplomatic)	13398.0
Violent Political Party	8920.0
Unknown	7888.0
Airports & Aircraft	7245.0
Journalists & Media	3297.0
Utilities	3227.0
Maritime	2099.0
Tourists	2048.0
NGO	1950.0
Telecommunication	679.0
Other	674.0
Food or Water Supply	547.0
Abortion Related	56.0

```
tc.plot(kind="bar",color="cornflowerblue",figsize=(15,6))
plt.title("Casualties in each Target Attack",fontsize=13)
plt.xlabel("Target Types",fontsize=13)
plt.xticks(fontsize=12)
plt.ylabel("Number of Casualties",fontsize=13)
plt.show()
```



```
tk=data[["Target Type","Killed"]].groupby("Target Type").sum().sort_values(by="Killed",ascending=False)
tk
```

Target Type	Killed
Private Citizens & Property	140504.0
Military	106047.0
Police	53704.0
Government (General)	26071.0
Business	23487.0
Transportation	13916.0
Religious Figures/Institutions	13413.0
Terrorists/Non-State Militia	9088.0
Unknown	4329.0
Airports & Aircraft	3767.0
Educational Institution	3745.0
Violent Political Party	3617.0
Government (Diplomatic)	3039.0
Utilities	1874.0
Journalists & Media	1501.0
Maritime	1191.0
NGO	1057.0
Tourists	758.0
Food or Water Supply	313.0
Other	255.0
Telecommunication	182.0
Abortion Related	10.0

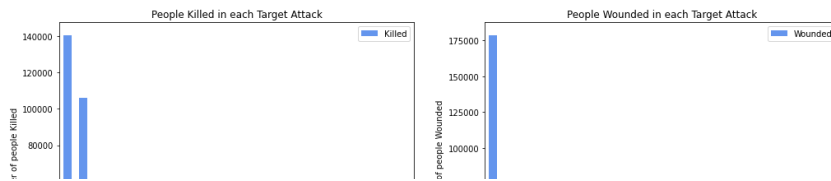
```
tw=data[["Target Type","Wounded"]].groupby("Target Type").sum().sort_values(by="Wounded",ascending=False)
tw
```

	Wounded
Target Type	
Private Citizens & Property	178672.0
Military	71038.0
Police	64703.0
Business	54531.0
Government (General)	41184.0
Transportation	40679.0
Religious Figures/Institutions	24477.0
Government (Diplomatic)	10359.0
Educational Institution	10227.0
Terrorists/Non-State Militia	8223.0
Violent Political Party	5303.0
Unknown	3559.0
Airports & Aircraft	3478.0
Journalists & Media	1796.0
Utilities	1353.0
Tourists	1290.0
Maritime	908.0
NGO	893.0
Telecommunication	497.0
Other	419.0
Food or Water Supply	234.0
Abortion Related	46.0

```
fig=plt.figure()
ax0=fig.add_subplot(1,2,1)
ax1=fig.add_subplot(1,2,2)

#Killed
tk.plot(kind="bar",color="cornflowerblue",figsize=(17,6),ax=ax0)
ax0.set_title("People Killed in each Target Attack")
ax0.set_xlabel("Target Types")
ax0.set_ylabel("Number of people Killed")

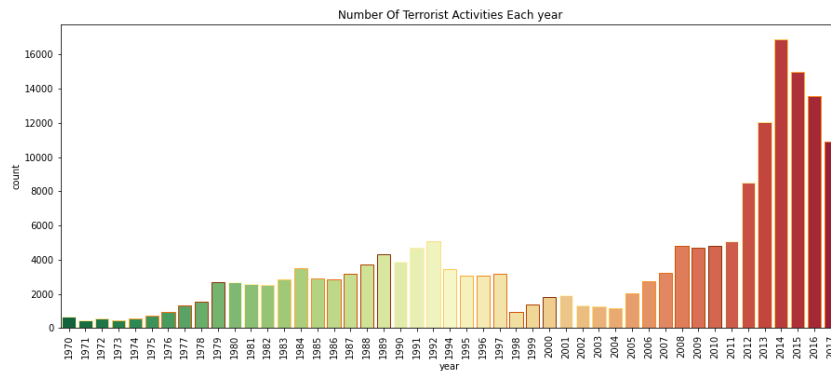
#Wounded
tw.plot(kind="bar",color="cornflowerblue",figsize=(17,6),ax=ax1)
ax1.set_title("People Wounded in each Target Attack")
ax1.set_xlabel("Target Types")
ax1.set_ylabel("Number of people Wounded")
plt.show()
```

6. Number of Terrorist Activities each Year



```
plt.subplots(figsize=(15,6))
sns.countplot('year',data=data,palette='RdYlGn_r',edgecolor=sns.color_palette("YlOrBr", 10))
plt.xticks(rotation=90)
plt.title('Number Of Terrorist Activities Each year')
plt.show()
```



Since 2014 and 2015 has a large number of Terrorist activities

Number of attack were there in 1970 & 2017 and Also find percentage the attacks have increased

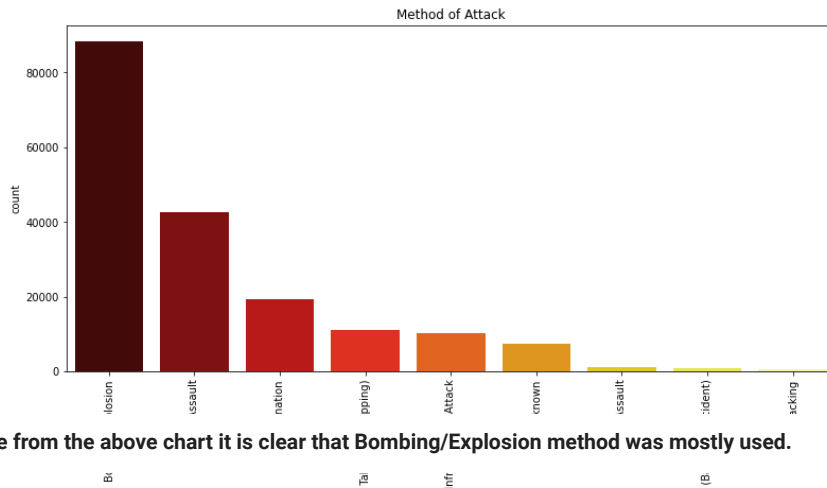
```
year=data.year.value_counts().to_dict()
rate=((year[2017]-year[1970])/year[2017])*100
print(year[1970],'attacks happened in 1970 &',year[2017],'attacks happened in 2017')
print('So the number of attacks from 1970 has increased by',np.round(rate,0),'% till 2017')
```

651 attacks happened in 1970 & 10900 attacks happened in 2017
So the number of attacks from 1970 has increased by 94.0 % till 2017

7. Methods of attack

```
plt.figure(figsize=(13,6))
sns.countplot(data['Attack Type'],order=data['Attack Type'].value_counts().index,
              palette='hot')
plt.xticks(rotation=90)
plt.xlabel('Method')
plt.title('Method of Attack')
plt.show()
```

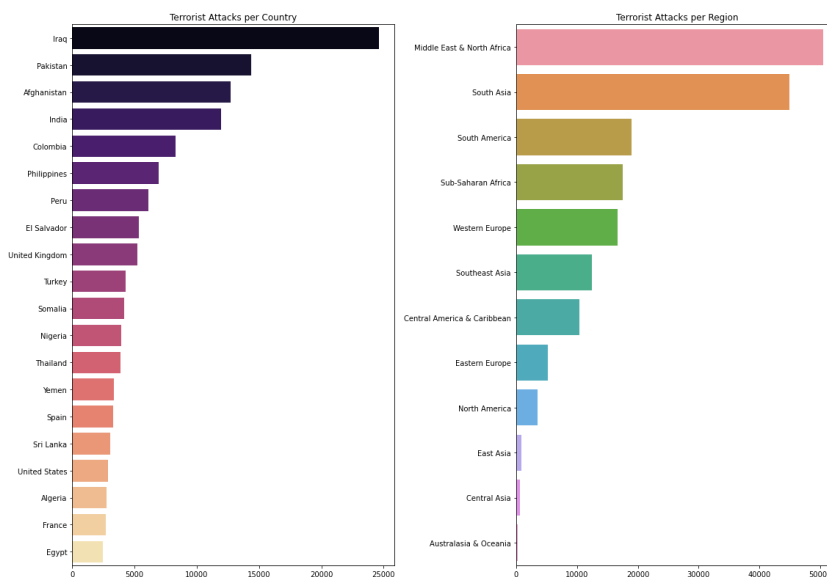
```
/usr/local/lib/python3.8/dist-packages/seaborn/_decorators.py:36: FutureWarning: P
warnings.warn(
```



Since from the above chart it is clear that Bombing/Explosion method was mostly used.

8. Total number of terrorist attack in each country and regions using barplot

```
fig, axes = plt.subplots(figsize=(16, 11), nrows=1, ncols=2)
sns.barplot(x = data['Country'].value_counts()[:20].values, y = data['Country'].value_counts()[:20].index,
            ax=axes[0], palette = 'magma');
axes[0].set_title('Terrorist Attacks per Country')
sns.barplot(x=data['Region'].value_counts().values, y=data['Region'].value_counts().index,
            ax=axes[1])
axes[1].set_title('Terrorist Attacks per Region')
fig.tight_layout()
plt.show()
```



9. Humanity Affected (World-wide) by Terrorist Attacks from 1970 to 2017

1-Total Casualties (Killed + Wounded) due to Terrorist Attacks

```
casualty=data.loc[:, "Casualty"].sum()
print("Total number of Casualties due to Terrorist Attacks from 1970 to 2017 across the world :\n",casualty)

Total number of Casualties due to Terrorist Attacks from 1970 to 2017 across the world :
935737.0
```

2-Killed due to Terrorist Attacks

```
kill=data.loc[:, "Killed"].sum()
print("Total number of people killed due to Terrorist Attacks from 1970 to 2017 across the world :\n",kill)

Total number of people killed due to Terrorist Attacks from 1970 to 2017 across the world :
411868.0
```

3-Wounded due to Terrorist Attacks

```
wound=data.loc[:, "Wounded"].sum()
print("Total number of people killed due to Terrorist Attacks from 1970 to 2017 across the world :\n",wound)

Total number of people killed due to Terrorist Attacks from 1970 to 2017 across the world :
523869.0
```

▼ Observations

1-Year wise Attacks :

- (i) Attacks
 - (a) Most number of attacks: 16903 in 2014
 - (b) Least number of attacks: 471 in 1971

- (ii) Casualties
 - (a) Most number of casualties: 85618 in 2014
 - (b) Least number of casualties: 255 in 1971

- (iii) Killed
 - (a) Most number of people killed: 44490 in 2014
 - (b) Least number of people killed: 173 in 1971

2- Region wise Attacks :

- (i) Attacks
 - (a) Most number of attacks: 50474 in "Middle East & North Africa"
 - (b) Least number of attacks: 282 in "Australasia & Oceania"

- (ii) Casualties
 - (a) Most number of casualties: 351950 in "Middle East & North Africa"
 - (b) Least number of casualties: 410 in Australasia & Oceania

- (iii) Killed
 - (a) Most number of people killed: 137642 in "Middle East & North Africa"
 - (b) Least number of people killed: 150 in "Australasia & Oceania"

- (iv) Wounded
 - (a) Most number of people wounded: 214308 in "Middle East & North Africa"
 - (b) Least number of people wounded: 260 in "Australasia & Oceania"

3- Country wise Attacks [Top 10] :

- (i) Attacks

- (a) Most number of attacks: 24636 in "Iraq"
- (b) Least number of attacks: 4292 in "Turkey"

(ii) Casualties

- (a) Most number of casualties: 213279 in "Iraq"
- (b) Least number of casualties: 22926 in "Philippines"

(iii) Killed

- (a) Most number of people killed: 78589 in "Iraq"
- (b) Least number of people killed: 12053 in "El Salvador"

(iv) Wounded

- (a) Most number of people wounded: 134690 in "Iraq"
- (b) Least number of people wounded: 10328 in "Colombia"

4- City wise Attacks [Top 10] :

(i) Attacks

- (a) Most number of attacks: 7589 in "Baghdad"
- (b) Least number of attacks: 1019 in "Athens"

(ii) Casualties

- (a) Most number of casualties: 77876 in "Baghdad"
- (b) Least number of casualties: 5748 in "Aleppo"

(iii) Killed

- (a) Most number of people killed: 21151 in "Baghdad"
- (b) Least number of people killed: 2125 in "Aleppo"

(iv) Wounded

- (a) Most number of people wounded: 56725 in "Baghdad"
- (b) Least number of people wounded: 4955 in "Mogadishu"

5- Group and Country wise Attacks [Top 10] :

(i) Attacks

- (a) Most number of attacks : 7423 by "Taliban" in "Afghanistan" (b) Least number of attacks : 2087 by "Boko Haram" in "Nigeria"

(ii) Casualties

- (a) Most number of casualties : 57140 by "Taliban" in "Afghanistan"
- (b) Least number of casualties : 12068 by "Farabundo Marti National Liberation Front (FMLN)" in "El Salvador"

(iii) Killed

- (a) Most number of people killed : 31058 by "Islamic State of Iraq and the Levant (ISIL)" in "Iraq"
- (b) Least number of people killed : 6014 by "Tehrik-i-Taliban Pakistan (TTP)" in "Pakistan"

(iv) Wounded

- (a) Most number of people wounded : 27871 by "Taliban" in "Afghanistan"
- (b) Least number of people wounded : 4795 by "Kurdistan Workers' Party (PKK)" in "Turkey"

6-Number of Terrorist Activities each Year

- (i) Since 2014 and 2015 has a large number of Terrorist activities.

8- Total number of terrorist attack in each country and regions using barplot

7-Methods of attack

- (i) Since from the above chart it is clear that Bombing/Explosion method was mostly used.

9-Humanity Affected (World-wide) by Terrorist Attacks from 1970 to 2017 :

- (i) Total number of Casualties due to Terrorist Attacks from 1970 to 2017 across the world : 935737
- (ii) Total number of people killed due to Terrorist Attacks from 1970 to 2017 across the world : 411868
- (iii) Total number of people killed due to Terrorist Attacks from 1970 to 2017 across the world : 523869

Insights derived from the above EDA:

- 1-Attacks has increased but number of people killed manier times as attack happened.
- 2-Iraq has the most attacks.
- 3-The Middle East and North Africa Regions has most taregeted.
- 4-Maximum number of attacks are from Bombing/Explosions.
- 5-There are maximum number of attacks in Private citizens and Property. Taliban and ISIL has a most active organisation.

▼ CONCLUSION

We exploited the resources of the Python language and its libraries for our use and have managed to complete our main objective of Exploratory Data Analysis of the Global Terrorist Dataset.

The comprehensive analysis done for the world as well as specifically for India gives us enough information, which can help us to conclude and trace some very significant insights and conclusions.

The maps used are interactive in nature and dynamic, which make them more interesting but at no point have we compromised with the information in order to accommodate the aesthetics.

Any peculiar or not expected trend has been examined in order to make it more readable and understandable for the readers.

In 2017, an estimated 10,900 terrorist attacks were executed.