Welcome To Our EDA Project

CAPSTONE PROJECT - 1

Our Project is

Global Terrorism Analysis

👉 Team Name : Working With insights👈

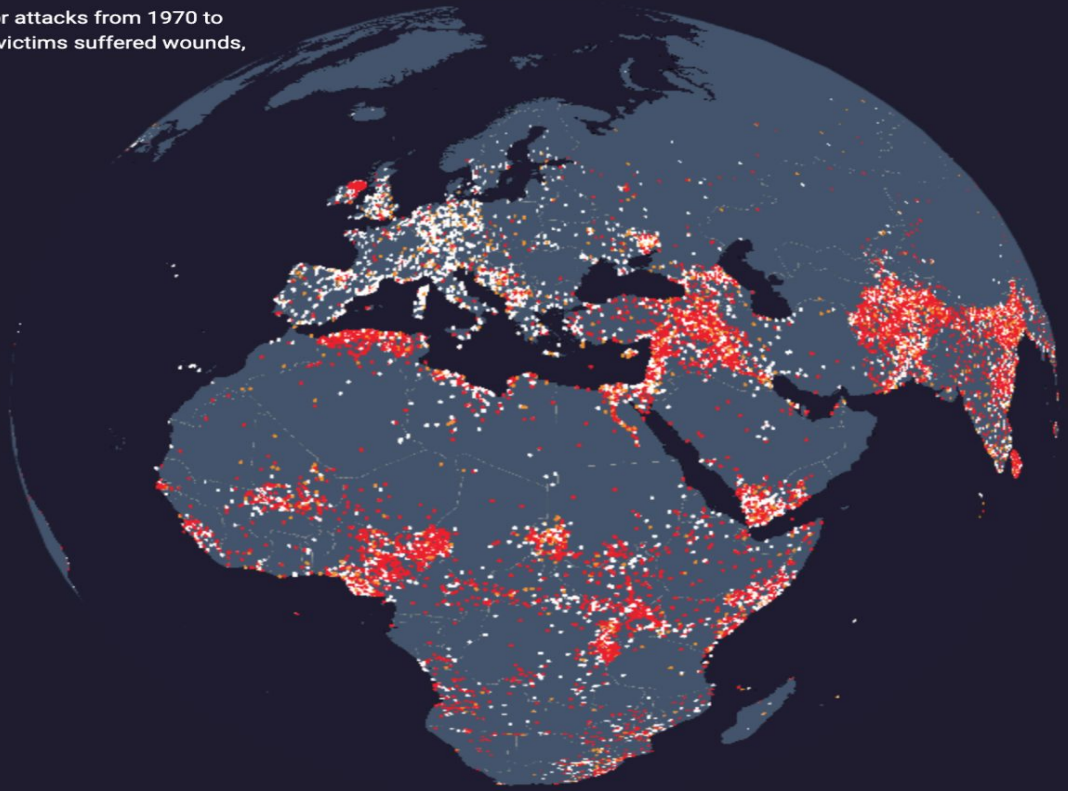
Team Members Name :

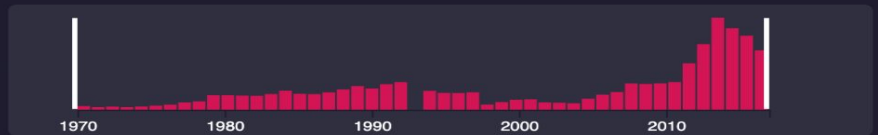
- Nikita Verma.
- Tejaswini Saju.
- Ashwini Kalamkar.
- Firaz Thakur.

Global Terror, 1970 - 2017

This globe spatially visualizes terror attacks from 1970 to 2017. The colours indicate wether victims suffered wounds, damages or fatalities.

- Fatal
- Wounded
- Damages





Use

Global Terrorism Analysis

1) *Defining problem Statement.*
2) *Importing libraries.*
3) *Descriptive Statistic.*
4) *Graphical Representation.*
5) *Observation.*

Problem Statement

Data provided by the Global Terrorism Database.csv file is in unformatted manner, uneven data, and duplicate data and also some data columns it is irrelevant, because it's a piled-up data coming from various different countries.

For doing the analysis on the data the data needs to be in correct format and well organized formed the main objective of the analysis is to obtain the meaning full information and facts from the given huge datasets by cleaning the datasets, doing a proper analysis , visualization and plotting the useful information into different graph and charts so that the trend and relationship between the various indicators on which the analysis is done can be understand easily.

DATA DICTIONARY

- **Year** - Year of the attack
- **Month** - Month of the attack
- **Day** - Day of the attack
- **Region** - Name of the region where the attack happened consists of values like East Asia,Western Europe, etc
- **Country** – Name of the countries where the attack happened consists of values like Mexico, India, Iraq, Portugal
- **State** – Name of the provinces/states where the attack happened which consists of values like Lattakia , Manipur
- **City** – Name of the cities were attack happened consists of values like Baghdad, Mexico city, Imphal,
- **Latitude** - Latitude of the location
- **Longitude**- Longitude of the location

  Location -Gives information of where the incident took place
- **Summary**- Gives information about the attacks
- **Attack_type** - Consists of categories like explosion, armed assault, assassination, kidnapping.
- **Target_type** - Consists of categorical values like private citizens, military, police, government officials, transportation,education, religious institution, airports, etc
- **Gang_name** - Organization that claimed responsibility of an attack
- **Weapon_type** - Type of weapon used in the attack. Weapon Type 1 contains values like firearms, explosives, melee, vehicles etc.
- **Killed** - Number of people killed in any event.
- **Wounded** - Number of people wounded in any event.

```
#Importing some required libraries
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
from matplotlib import style
import seaborn as sns
import warnings
warnings.filterwarnings('ignore')
%matplotlib inline
```

```
[ ]  # RENAMING THE COLUMNS
terrorism_df.rename(columns = {'iyear':'Year', 'imonth':'Month', 'iday':'Day','country_txt':'Country','region_txt':'Region', 'attacktype1_txt':'Attack_type','targtype1_txt':'Target_type',
                               'weaptype1_txt':'Weapon_type','nkill':'Killed','gname':'Gang_name', 'nwound':'Wounded','provstate':'State','city':'City','latitude':'Latitude','longitude':'Longitude','summary':'Summary',}, inplace = Tr
terrorism_df
```

	eventid	Year	Month	Day	approxdate	extended	resolution	country	Country	region	...	addnotes	scite1	scite2	scite3	dbsource	INT_LOG	INT_IDEO	INT_MISC	INT_ANY	related
0	197000000001	1970	7	2	NaN	0	NaN	58	Dominican Republic	2	...	NaN	NaN	NaN	NaN	PGIS	0	0	0	0	NaN
1	197000000002	1970	0	0	NaN	0	NaN	130	Mexico	1	...	NaN	NaN	NaN	NaN	PGIS	0	1	1	1	NaN
2	197001000001	1970	1	0	NaN	0	NaN	160	Philippines	5	...	NaN	NaN	NaN	NaN	PGIS	-9	-9	1	1	NaN
3	197001000002	1970	1	0	NaN	0	NaN	78	Greece	8	...	NaN	NaN	NaN	NaN	PGIS	-9	-9	1	1	NaN
4	197001000003	1970	1	0	NaN	0	NaN	101	Japan	4	...	NaN	NaN	NaN	NaN	PGIS	-9	-9	1	1	NaN
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
181686	201712310022	2017	12	31	NaN	0	NaN	182	Somalia	11	...	NaN	"Somalia: Al-Shabaab Militants Attack Army Che...	"Highlights: Somalia Daily Media Highlights 2 ...	"Highlights: Somalia Daily Media Highlights 1 ...	START Primary Collection	0	0	0	0	NaN
181687	201712310029	2017	12	31	NaN	0	NaN	200	Syria	10	...	NaN	"Putin's 'victory' in Syria has turned into a ...	"Two Russian soldiers killed at Hmeymim base i...	"Two Russian servicemen killed in Syria mortar...	START Primary Collection	-9	-9	1	1	NaN
181688	201712310030	2017	12	31	NaN	0	NaN	160	Philippines	5	...	NaN	"Maguindanao clashes trap tribe members," Phil...	NaN	NaN	START Primary Collection	0	0	0	0	NaN
181689	201712310031	2017	12	31	NaN	0	NaN	92	India	6	...	NaN	"Trader escapes grenade attack in Imphal," Bus...	NaN	NaN	START Primary Collection	-9	-9	0	-9	NaN
181690	201712310032	2017	12	31	NaN	0	NaN	160	Philippines	5	...	NaN	"Security tightened in Cotabato following IED ...	"Security tightened in Cotabato City," Manila ...	NaN	START Primary Collection	-9	-9	0	-9	NaN

181691 rows × 135 columns

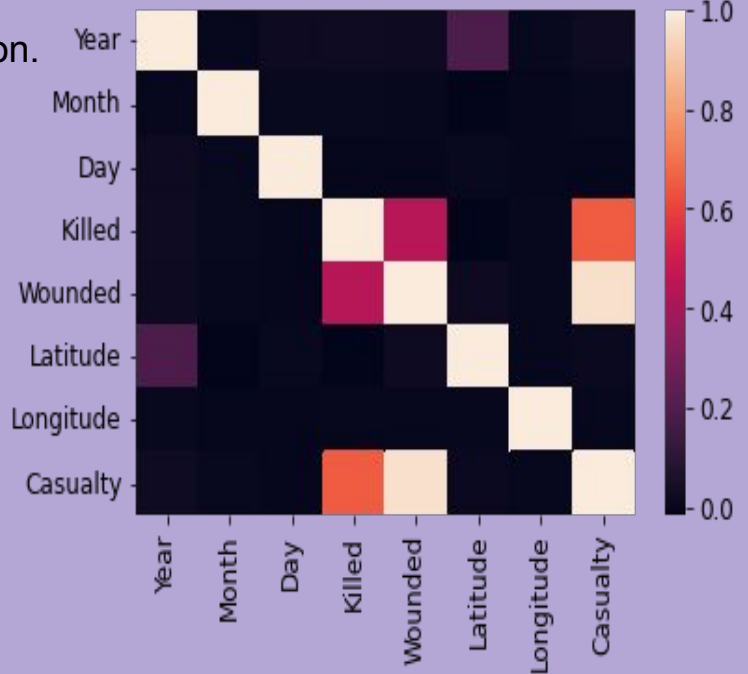
Global Terrorism

- Terrorisms direct affected the safety of citizens.
- Terrorism attacks affected on regions,country,cities and it creates bad impact on our countries and the international stability and prosperity.
- The idea of this project is creat a "Global Terrorism Analysis" report through we can find the most affected regions,countries,city.
- Which weapons they use ?
- How many people kills,wound in terrorist activity?
- We distribute whole analysis into four parts and lastly we put our observation.

⇛HEAT MAP ⇚

Heatmap is used to show relationships between two variables.

- Some data part of the heat map has a positive correlation.
- Some data part of the heat map has a negative correlation.
- Some data part of the heat map has a zero correlation.
- But very low data part of the heat map has a negative correlation.



Regions wise terrorist attacks

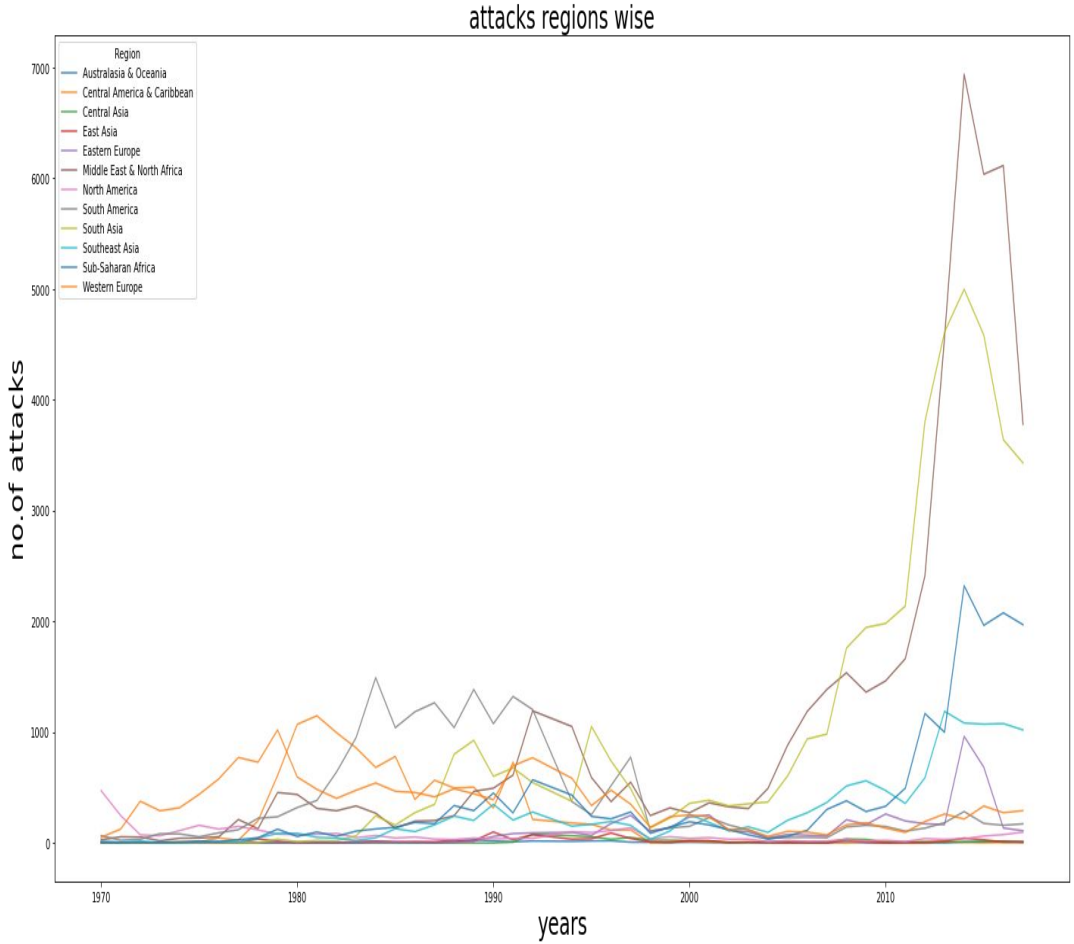
➥ Regions wise terrorist attacks shown by the line chart.

➙A line chaxis and a vertical line i.e. y-axis to report consists of a horizontal lines i.e. x-aesent.

➙ through line chart we conclude that :

1] Maximum attacks occur in Middle East and North Africa.

2] Minimum attacks occur in East Asia.



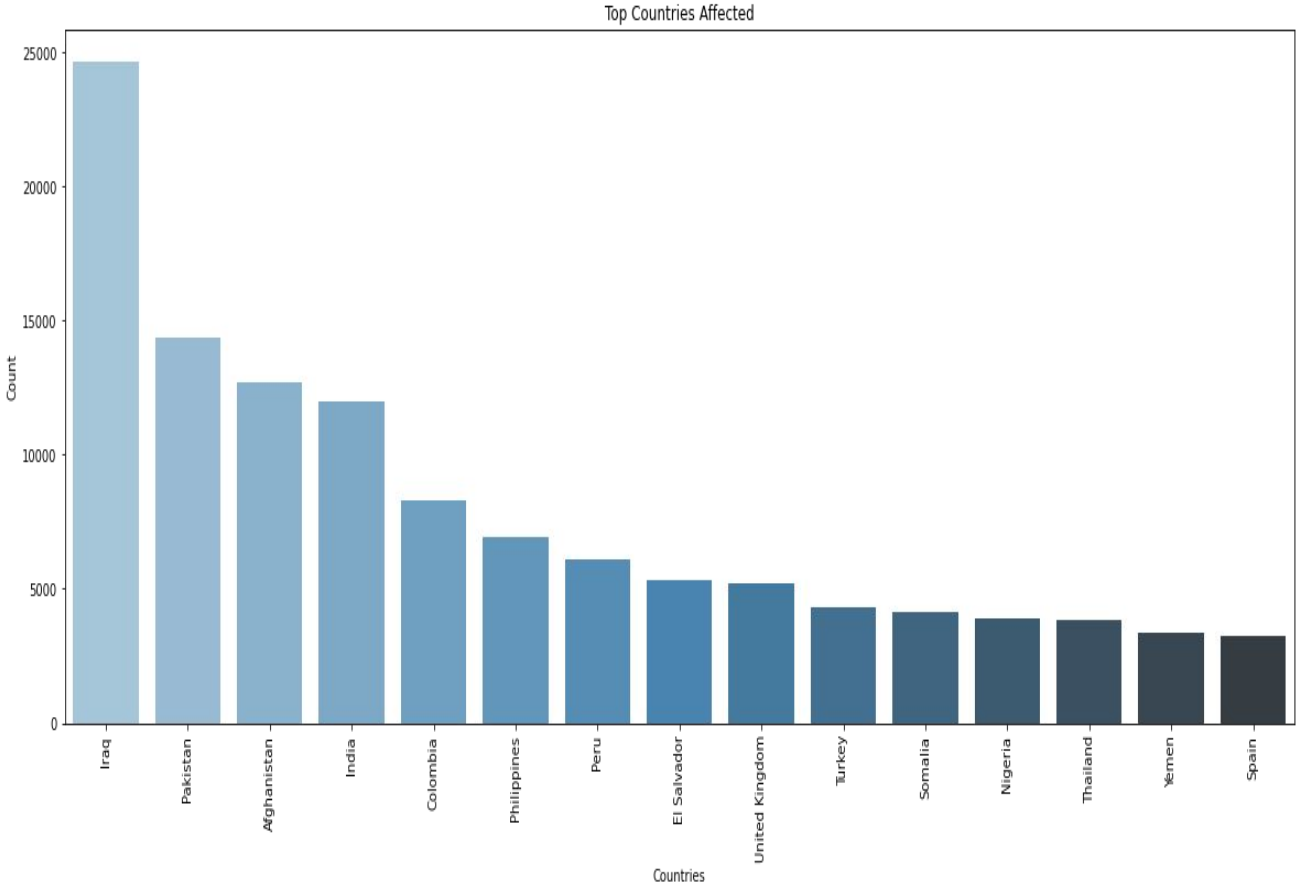
Country Wise Attacks

⏩Country wise attacks shown by the bar graph chart.

⟹ It consists of rectangles separated from each other with equal spaces.
⟹ For this bar graph we conclude that,

1] Maximum country wise attacks occur in Iraq from top 15 countries,
then after that pakistan,afghanistan,India etc.

2]Minimum countrywise attacks occur in Spain from top 15 countries.



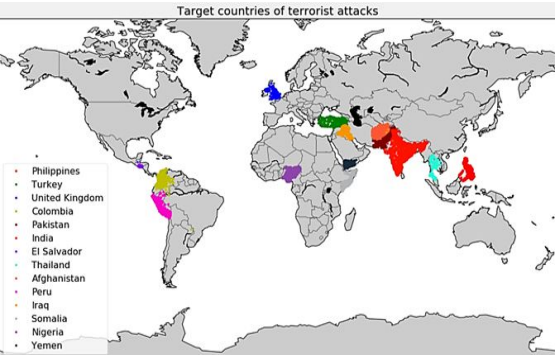
City Wise Attacks

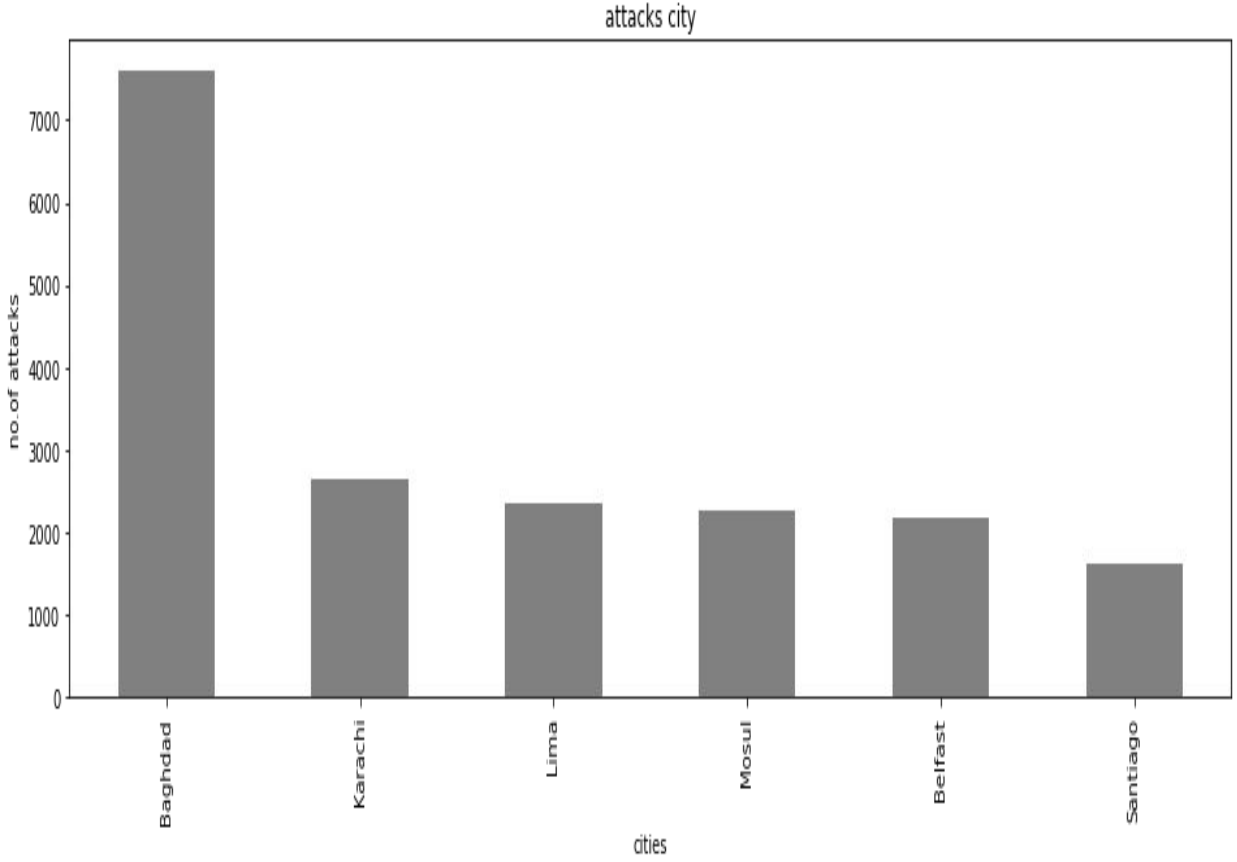
➠***city wise attacks shown by the bar graph.***

➠ ***through this bar graph we conclude that :***

A] Maximum city wise attacks Occur in baghdad.

B] Minimum city wise attacks occur in santiago.

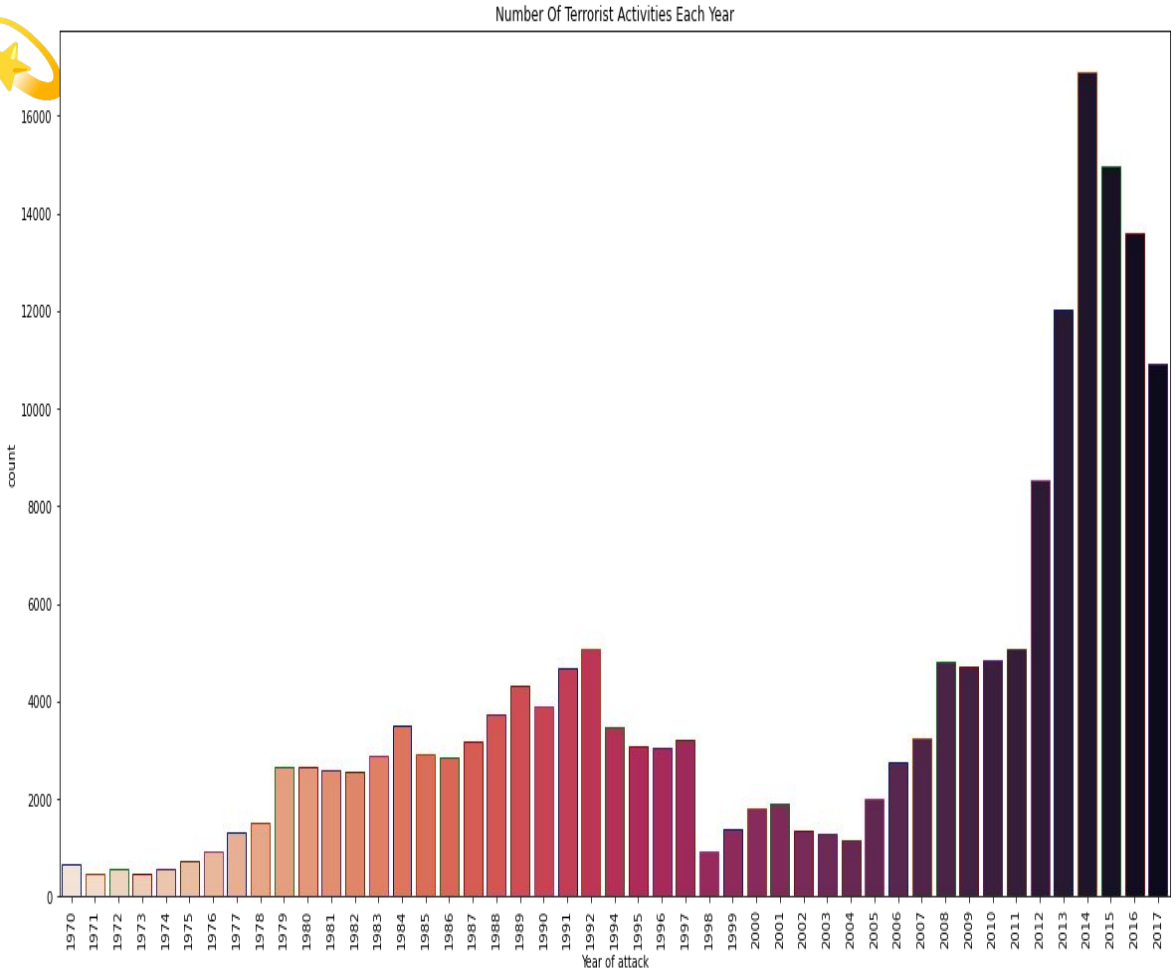




Year Wise Attacks

- Year wise attacks shown by the bar graph.
- Through this bar graph we conclude that:
- In this graph we can see that from 1970 to 2008 ups and down in the terrorist attacks. From 2008 it has increases very exponential till 2014 , then we can see the reducing number of terrorism attacks after 2014.

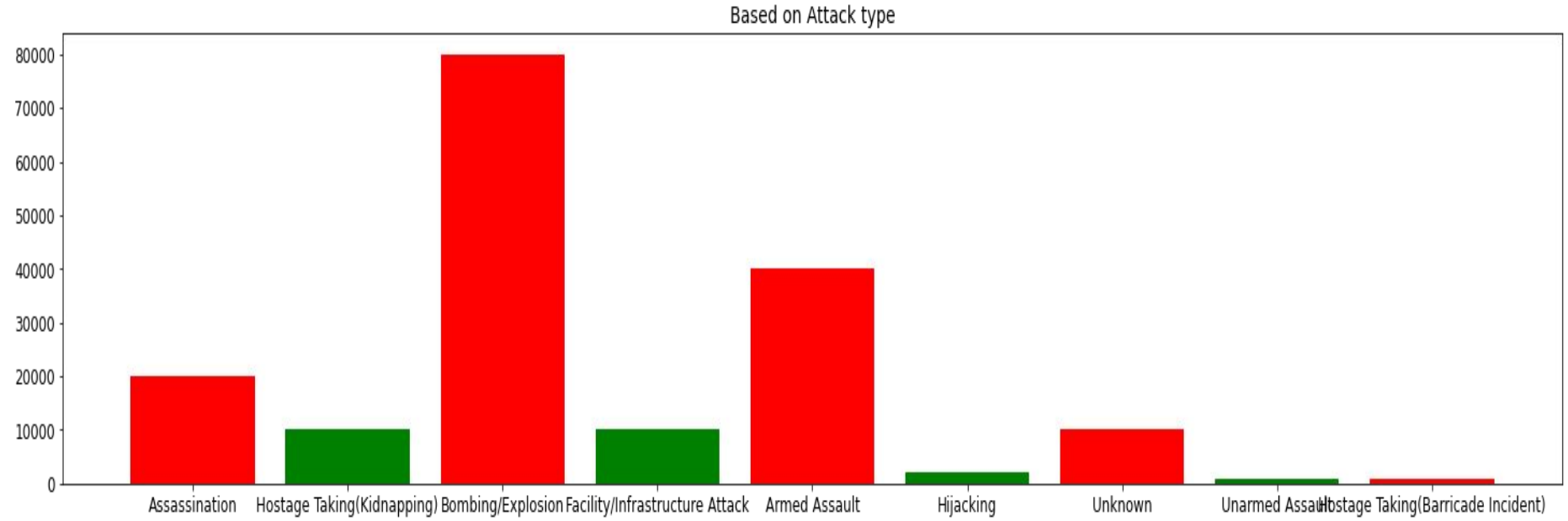
1. **Maximum number of attacks occurs in 2014.**
2. **Minimum number of attacks occurs in 1971.**



➢Based on attacks type

⏭based on attacks type shown by bar graph.
⏭through this graph we conclude that :

Most of the attacks happened to either Bomb or Explosion.



Based On Weapons Type

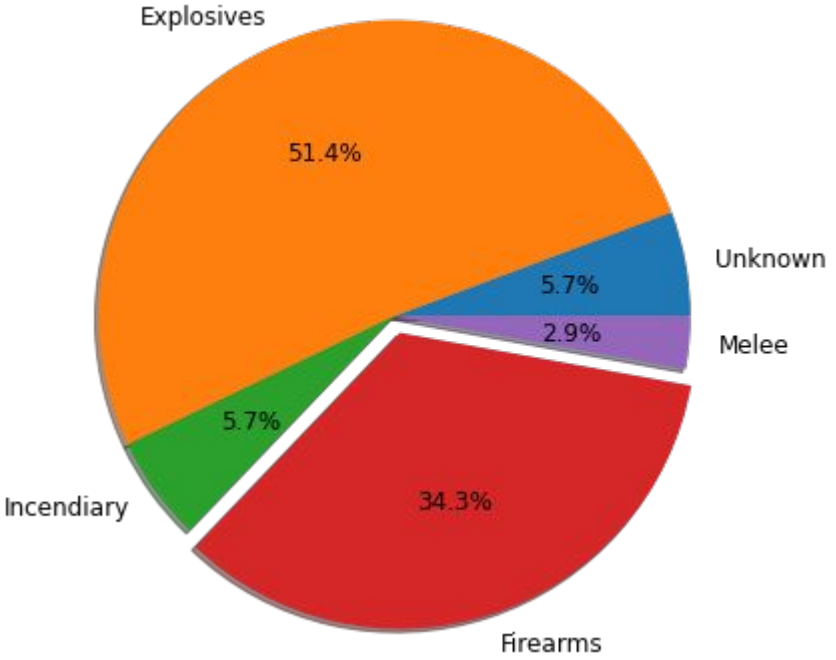
Based on weapons type shown by pie chart.

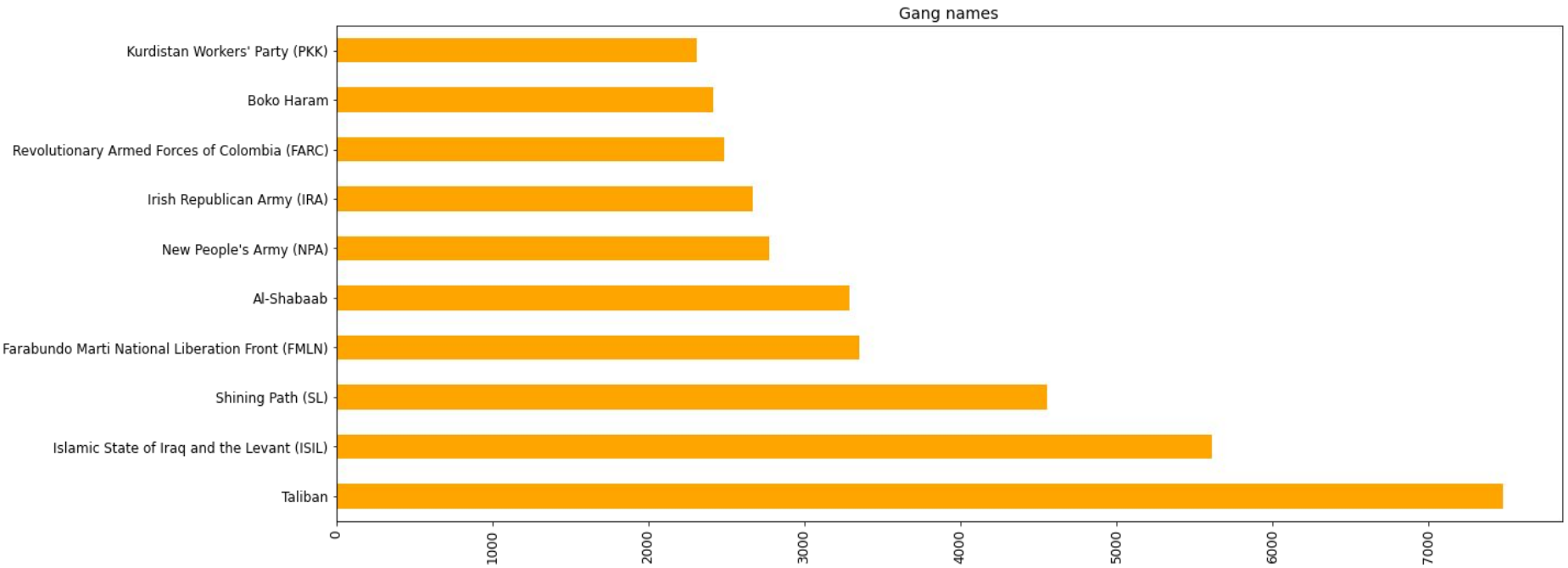
A pie chart is a type of graph that represents the data in the circular graph.

Through this pie chart we conclude that :

1] An Explosives (51.4%) type of weapons were most used in terrorist attacks.

2] The Melee (2.9%) type of weapons were least used in terrorist attacks.





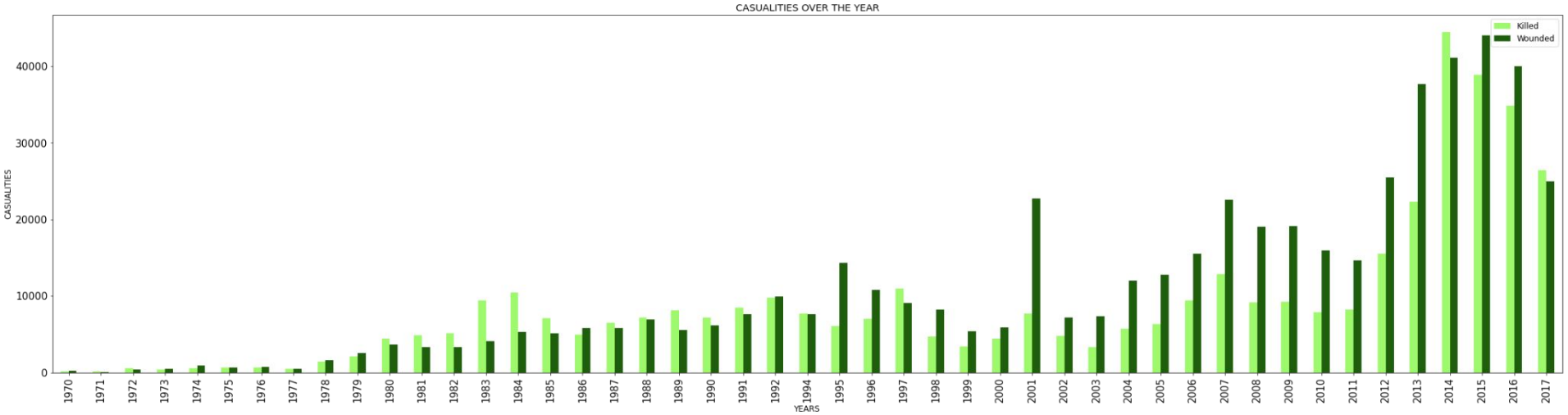
Gang Names :

1] Taliban is responsible for more than 7000 attacks.

2] It is the most dangerous gang.

➥Total Casualties(kill and wound)in each year

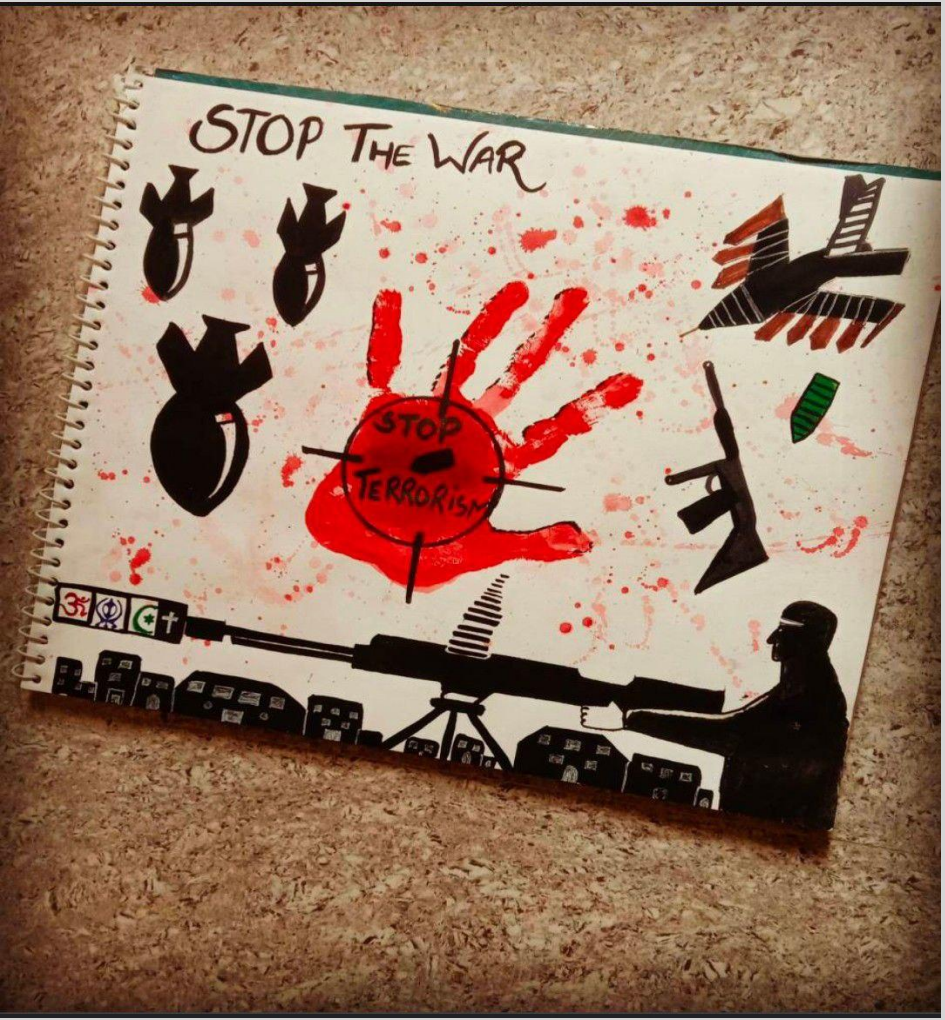
a. Maximum casualty occurs in 2014 .
b. Less casualty occurs in 1970 .
c. 1970 to 2014 causality has increased.



Observations

For our study we observed following insights:

- ★ Maximum attacks occur in Middle East and North Africa.
- ★ Minimum attacks occur in East Asia.
- ★ Maximum country wise attacks occur in Iraq from top 15 countries,then after that pakistan,afghanistan,India etc.
- ★ Minimum country wise attacks occur in Spain from top 15 countries.
- ★ Maximum city wise attacks occur in baghdad..
- ★ Minimum city wise attacks occur in santiago..
- ★ Maximum number of attacks occurs in 2014.
- ★ Minimum number of attacks occurs in 1971.
- ★ Most of the attacks happened to either Bomb or Explosion.
- ★ An Explosives (51.4%) type of weapons were most used in terrorist attacks.
- ★ The Melee (2.9%) type of weapons were least used in terrorist attacks.
- ★ Taliban is responsible for more than 7000 attacks.
- ★ It is the most dangerous gang.
- ★ Maximum casualty occurs in 2014 .
- ★ Less casualty occurs in 1970 .
- ★ 1970 to 2014 causality has increased.


STOP THE WAR
STOP
TERRORISM


STOP
TERRORISM


Thank You

Any Queries?