

A blue-tinted photograph of four individuals wearing balaclavas and holding rifles, positioned behind the title text.

Global Terrorism Exploratory Data Analysis

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Point To Discuss

- **Data Summary**
- **Data Cleaning**
- **Top attacked countries, cities, regions, years, months, groups**
- **In the world Map The Top Attacked Countries**
- **Attacks in every year**
- **Terrorist groups name and number of killed peoples**
- **Max number of deaths/kills in each country which is greater than 200**
- **AL-QAIDA**
- **Check which region is affected by terrorism in each year**
- **Most active gang in recent years**
- **Top 11 most attacked countries**
- **Gang which caused the maximum deaths in recent years**
- **Challenges faced**
- **Conclusion**

Data Summary/Data Cleaning

Shape of data

Rows-181691,
columns- 135

Null values

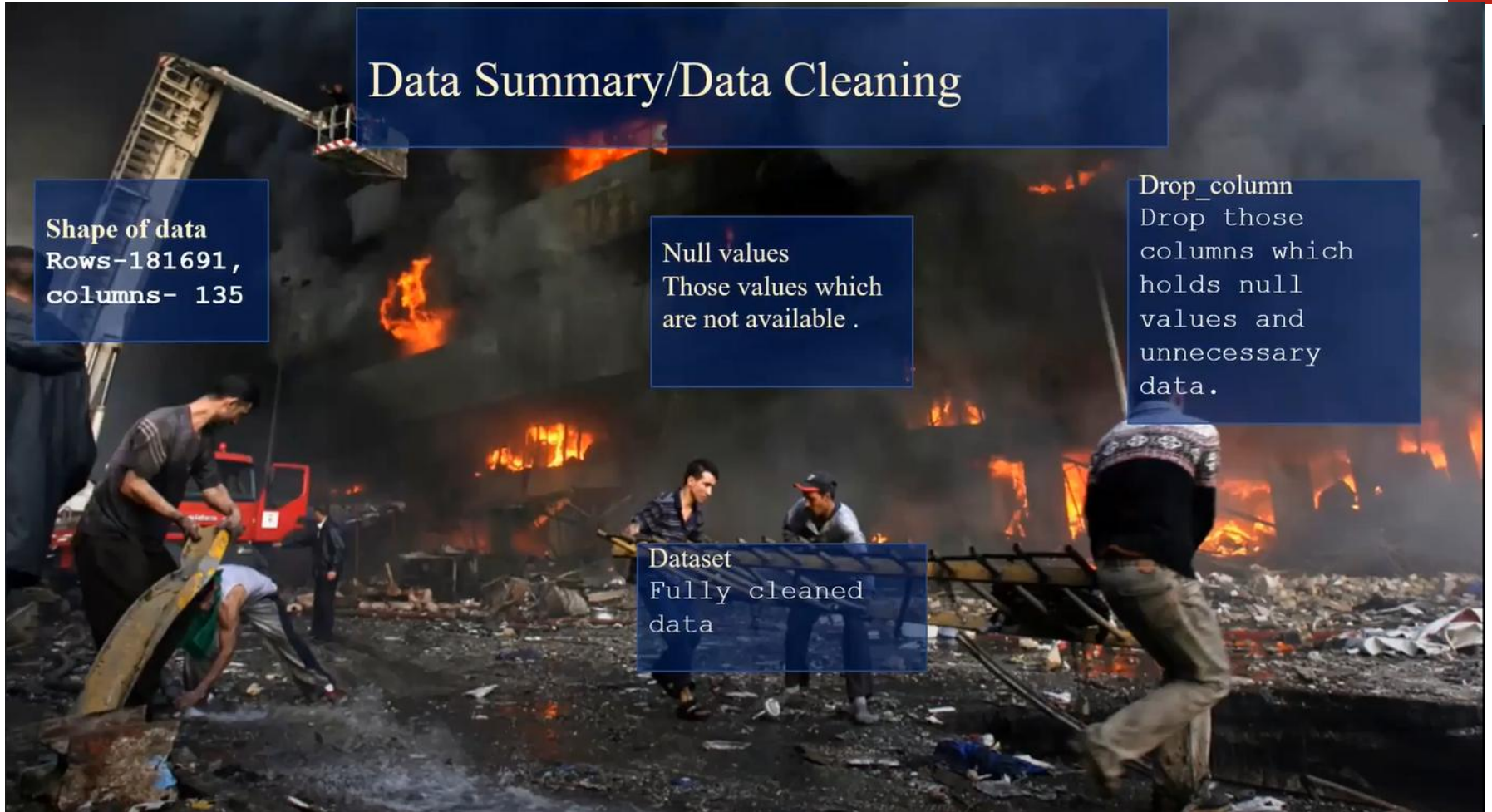
Those values which
are not available .

Drop_column

Drop those
columns which
holds null
values and
unnecessary
data.

Dataset

Fully cleaned
data



Top attacked in country, city, region, year, month, group

Country with most attacks: Iraq

City with most attacks: Baghdad

Region with the most attacks: Middle East & North Africa

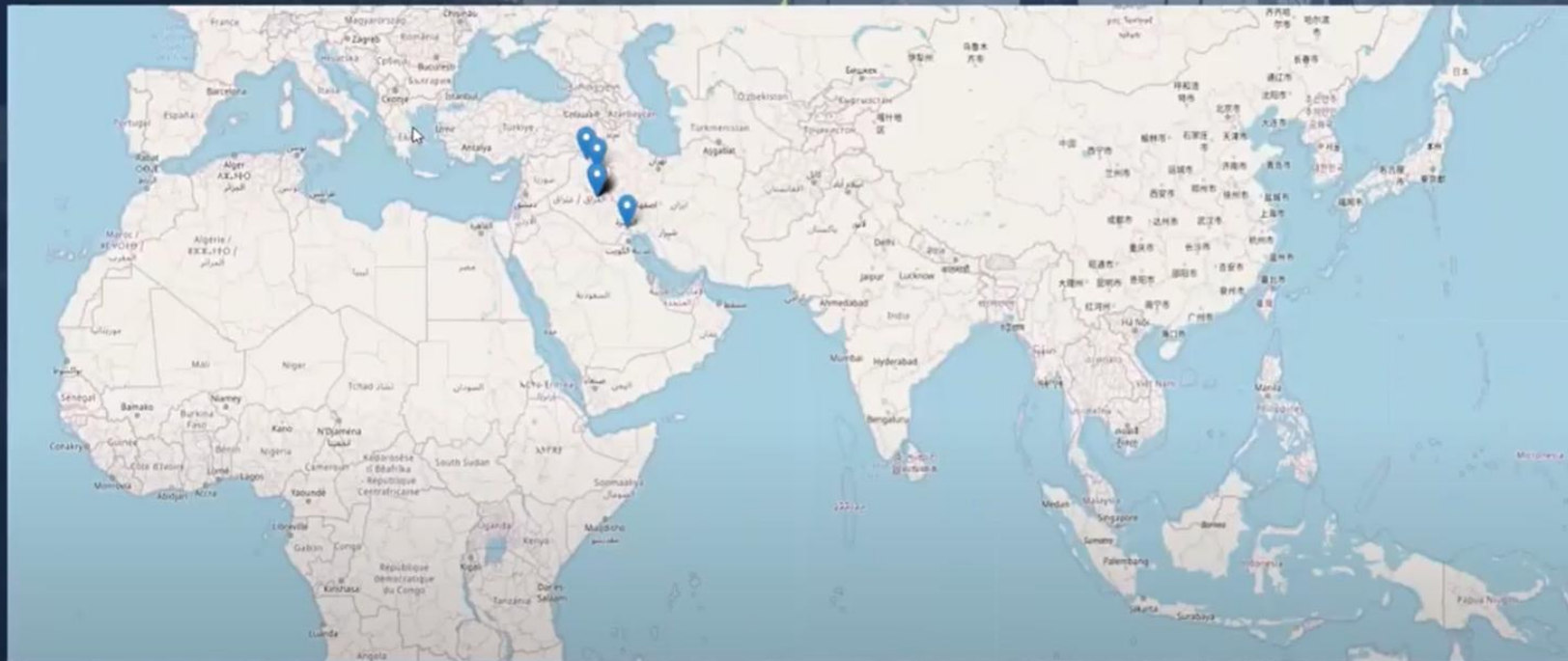
Year with the most attacks: 2014

Month with the most attacks: 5

Group with the most attacks: Taliban

Most Attack Types: Bombing/Explosion

In world Map Top attacked

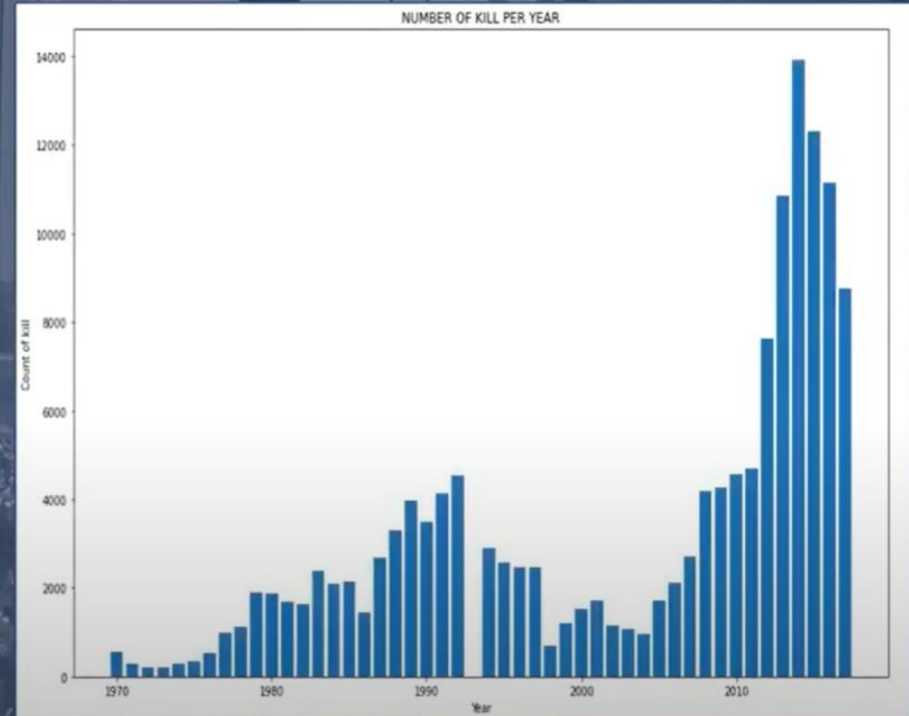


Attacks in every year

From the adjacent figure, we came to know about the total number of terrorist attacks in the years from 1970 to 2017.

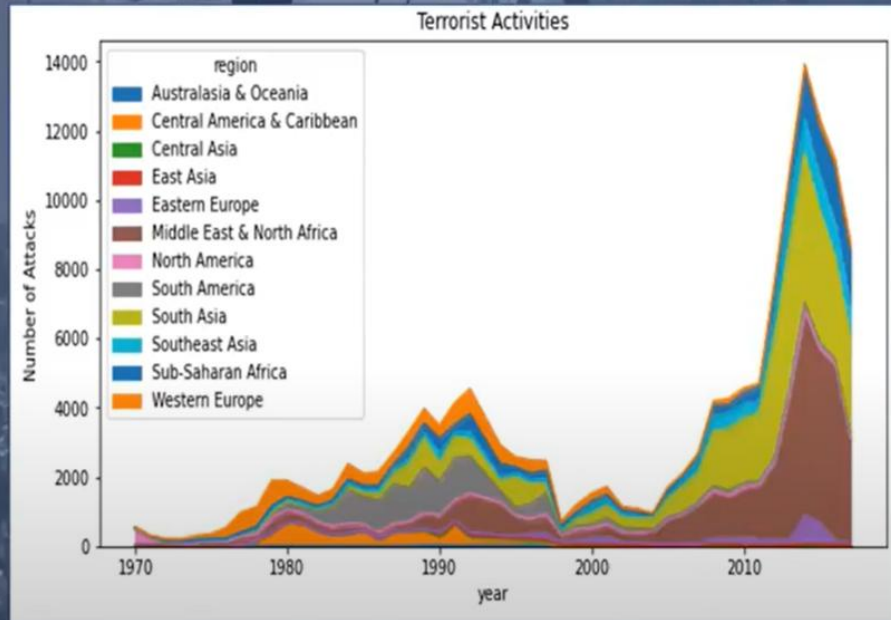
We can conclude that most attacks were done in the year 2014.

We can see here that attacks slowly start to increase from 1972 until about 1993 where until 2004 we see a downward global trend in Terrorist incidents then after 2014 the terrorist activities starts increasing till 2014 then slowly decreases.



Terrorist Activities (Number of Attacks vs Year)

The adjacent graph is plotted using area graph. It shows the total number of attacks in corresponding years and region. Most attacks were made in 2014 on Australasia & Oceania. In the 1970s we can see that most terrorist attacks occurred in Western Europe, followed by Latin and South America in the 1980s. But then there is an overall decline in the number of attacks between the mid-1990s and 2003.

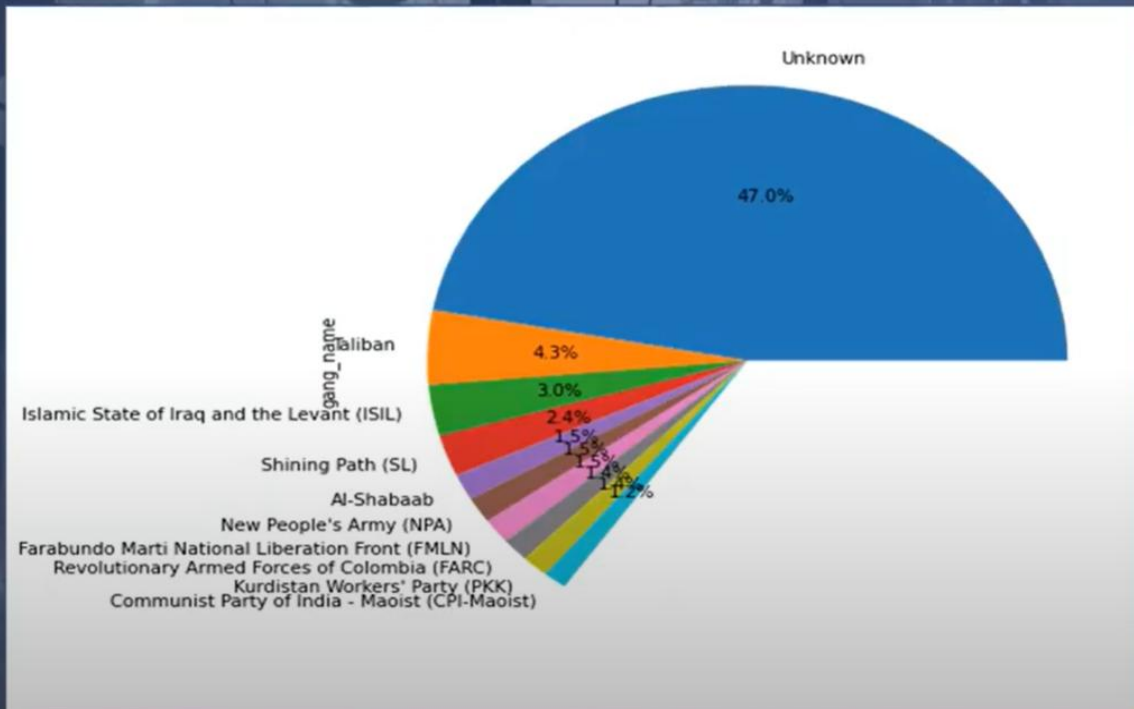


**We can see in this word cloud diagram that
Khyber Pakhtunkhwa
Administered Tribal
Baghdad
Northern Ireland
Jammu Kashmir are the
highly affected areas.**



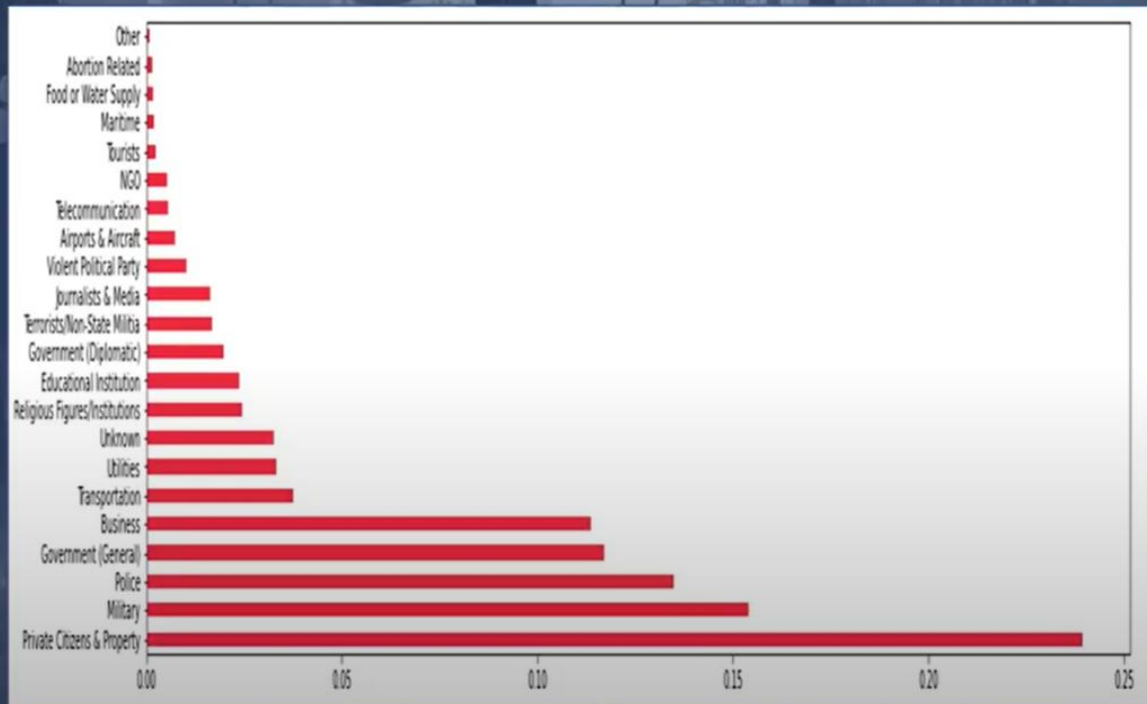
Percentage of attacks by each gangs out of total

The adjacent figure is plotted using a pie chart. Which shows the percentage of attacks made by different terrorist groups out of total attacks.



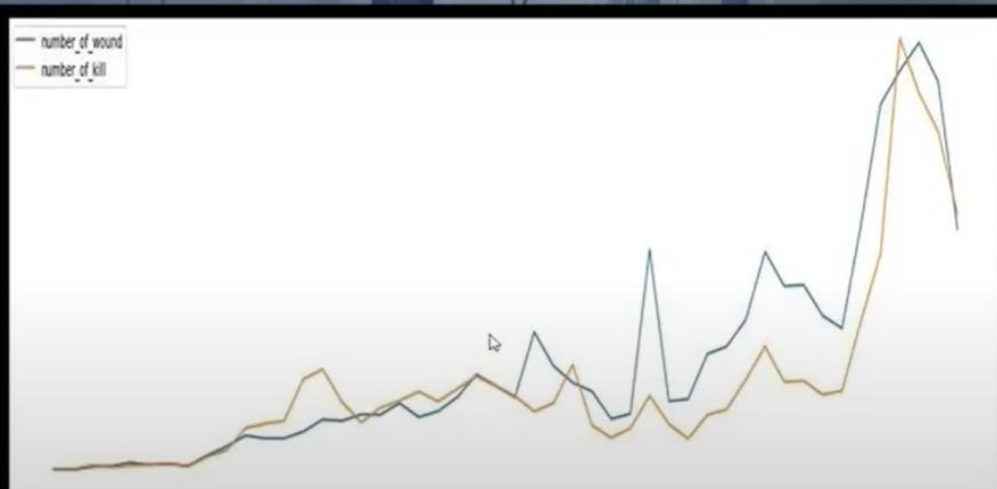
To know the target type of terrorists

The attached picture depicts that most of the terrorist gangs targeted the private citizens and property followed by military, police



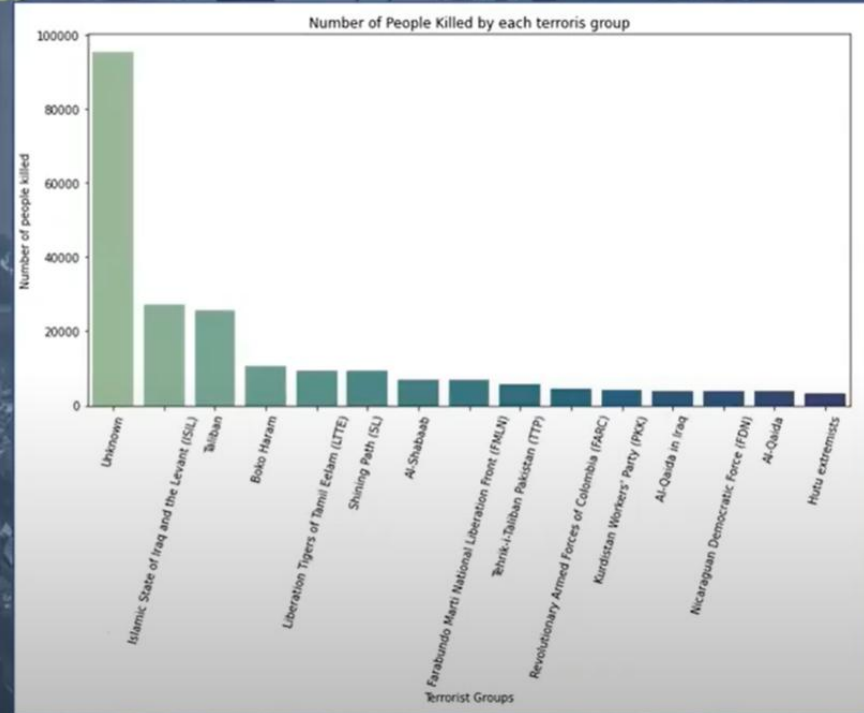
Compare the Number of kills and number of wounds

The attached graph shows the number of kills and number of wounds by different terrorist groups.



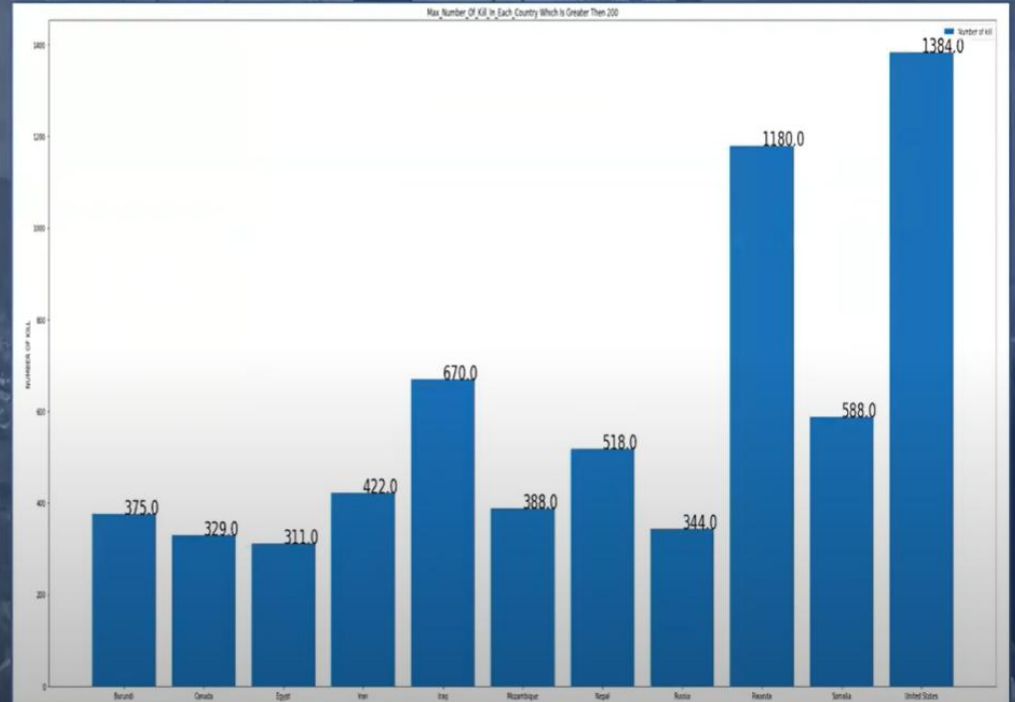
Terrorist group name and number of killed

From the bar graph, which shows the number of people killed by different terrorist groups, we can say that most people were killed by terrorists which is unknown followed by ISIL and the least number of people were killed by Hutu extremists group.



Max number of kill in each country which is greater than 200

The attached bar graph displays the total number of people killed in different countries. We can say that the most people were killed in United States i.e., 1384 people.



AL-QAIDA

AL_Qaida the most mischievous gang in early 20's have done most number kill till date and the weapon used for killing are only two:

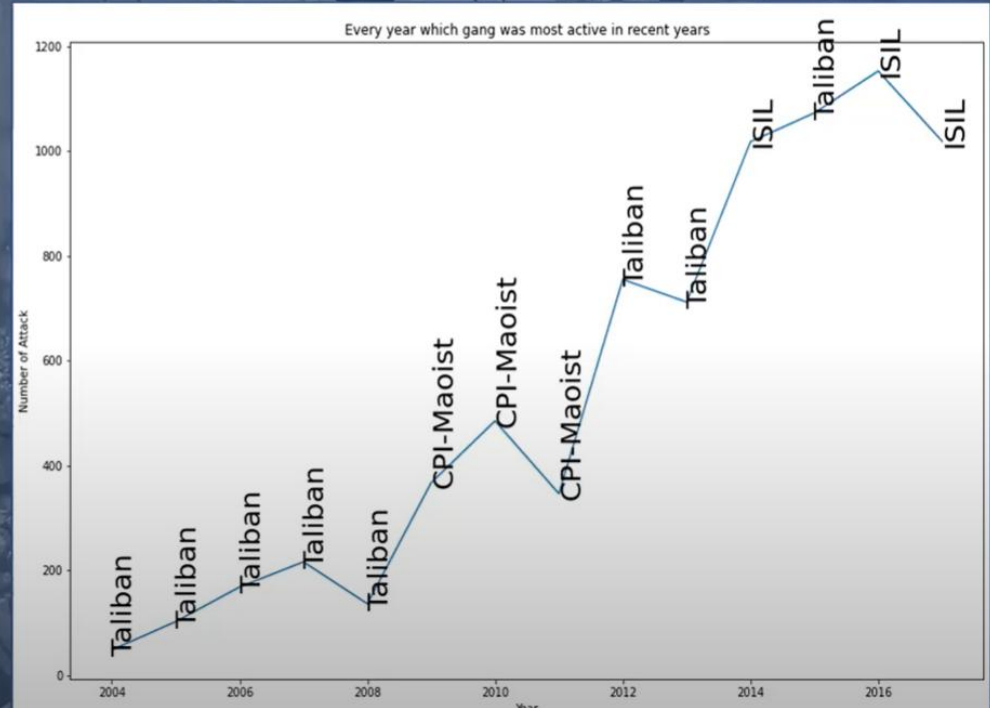
**Explosives and vehicle-borne explosive
so if we control on the illegal transportation of weapons then we can reduce Terrorist activities.**

We can see that in only one year (2001) there were 2 attacks on the same day and on the same country.....

so we can say that there might be some dispute between USA and Al_Qaida

To check which region is affected by terrorism in each year

From the depicted map which shows the total number of attacks by different terrorist groups in different years, we can say the most active terrorist gang is *Taliban*.

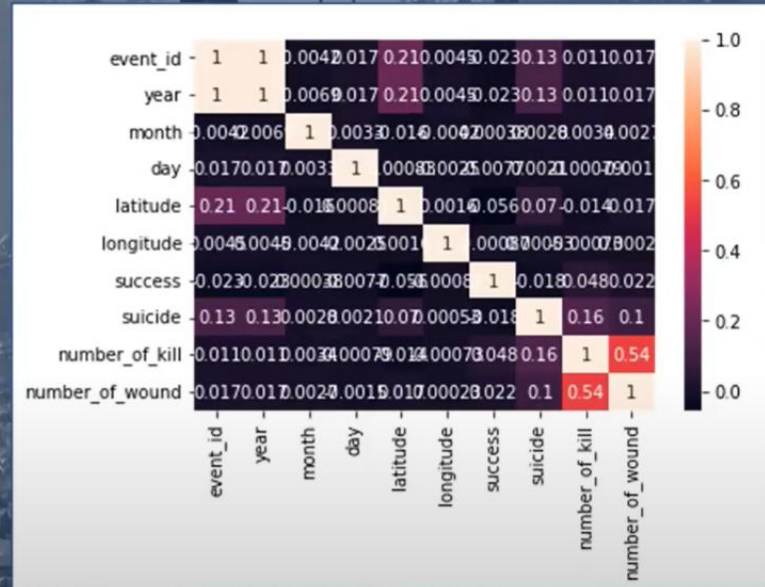


Top 11 most attacked countries

Country	Number of kill
Iraq	21510
Pakistan	12756
Afghanistan	10871
India	10491
Colombia	6865
Philippines	5843
Peru	4916
Turkey	3767
El Salvador	3369
Thailand	3346
United Kingdom	3212

Correlations

The figure shows correlation matrix where darker the shade of the block, more the attributes are correlated proportionately. Here we can see that country and latitude are correlated which is expected. Values of neither of those two parameters change and hence they show a strong relation. This observation shows that most of the attacks are done by the citizen of their own country. Such a relation provides an interesting insight into how to perceive international terrorism as the proportion of international terrorism is significantly less in comparison with domestic terrorism. Attack type and weapon used in the attack also hold close ties with each other as attack type is defined based on the weapons used in that incident. Strangely 'success' which represents the rate of success of any attack, shows no significant connections with any other listed parameters. The block representing year and success has a darker shade which means that both these parameters are inversely related to each other. So, over time, the rate of success of any attack has reduced. This is a noteworthy observation that in an era of growing terrorism, counter-terrorist forces can restrict the success factor of attacks more than they used to.



Challenges faced

Working on this amazing topic was very informative for us. The challenges we faced here in it were bare minimum. The challenges we faced are listed as below:

1. To extract the dataset holding the columns with excluded naan values. Doing this we didn't want to loose any non-naan values but we did loose.
2. We wanted to utilise all the columns as we consider that each column given in the dataset must have some relation with another column, and if not we can create by performing a search analysis. And we did it for a few columns but some were still proved to be unwanted....and unfortunately with an ugly heart we had to dump those unwanted columns.
3. We found very less columns holding character data as compared to numerical data....which affected the efficacy of the correlation.
4. The biggest challenge which occurred was to figure out the name of the 'Unknown column' which held the most number of deaths...it adhered a challenge in putting up the most required information.

Conclusion -1

1. **Country with most attacks:** Iraq
2. **City with most attacks:** Baghdad
3. **Region with the most attacks:** Middle East & North Africa
4. **Year with the most attacks:** 2014
5. **Month with the most attacks:** 5
6. **Group with the most attacks:** Taliban
7. **Most Attack Types:** Bombing/Explosion

Conclusion-2

8.gang_name VS number_of_kill

- a) Islamic State of Iraq and the Levant (ISIL) 27174.0
- b) Taliban 25785.0
- c) Boko Haram 10732.0
- d) Liberation Tigers of Tamil Eelam (LTTE) 9392.0
- e) Shining Path (SL) 9315.0
- f) Al-Shabaab 6836.0
- g) Farabundo Marti National Liberation Front (FMLN) 6801.0
- h) Tehrik-i-Taliban Pakistan (TTP) 5580.0
- i) Revolutionary Armed Forces of Colombia (FARC) 4380.0
- j) Kurdistan Workers' Party (PKK) 4093.0
- k) Al-Qaida in Iraq 3984.0
- l) Nicaraguan Democratic Force (FDN) 3883.0
- m) Al-Qaida 3818.0
- n) Hutú extremists 3203.0

Conclusion-3

- 9. Maximum human killed by Al-Qaida
- 10. In last 20 year Al-Qaida is not active Gang.
- 11. country VS number_of_kill

- a) Iraq 21510
- b) Pakistan 12756
- c) Afghanistan 10871
- d) India 10491
- e) Colombia 6865
- f) Philippines 5843
- g) Peru 4916
- h) Turkey 3767
- i) El Salvador 3369
- j) Thailand 3346
- k) United Kingdom 3212

Conclusion-4

12.From Last 20 Year 3 Gang are active.

- a) Taliban
- b) CPI
- c) ISIL

Conclusion-5

13.YEAR--GANG-----NUMBER OF MAXIMUM KILL

a) 2004	---Taliban---	48
b) 2005	---Taliban---	102
c) 2006	---Taliban---	168
d) 2007	---Taliban---	216
e) 2008	---Taliban---	136
f) 2009	---CPI-Maoist---	367
g) 2010	---CPI-Maoist---	485
h) 2011	---CPI-Maoist---	346
i) 2012	---Taliban---	755
j) 2013	---Taliban---	712
k) 2014	---ISIL---	1018
l) 2015	---Taliban---	1073
m) 2016	---ISIL---	1153
n) 2017	---ISIL---	1019

Conclusion-6

14. These are two methods mostly used by all three most active gangs is Bombing/Explosion, Armed Assault and Hostage Taking (Kidnapping).

15. Al_Qaida the most mischievous gang in early 20's has done the most number of kills till date and the weapons used for killing is only two explosives and vehicle-borne explosive so if we control on the illegal transportation of weapons, we can reduce the attacks in only one year (2001). There were 2 attacks on the same day so we can say that there might be some disputes between USA and Al_Qaida

THANK YOU