Capstone Project - 1
Global Terrorism Analysis

Kartika Sharma

What does data says about terrorism

- Defining problem statement
- Feature Selection
- Highlights
- Data analysis
- Drawing Insights

What has happened over the years?

Terrorism, in a broad sense, the deliberate use of violence indiscriminately as a means of creating fear among the masses,or fear of achieving a religious or political purpose.

The main objective is to do exploratory data analysis which could help in gaining insight if the terror attacks. This would in turn help them in comparing the areas affected, people killed , wounded etc. over the years (1970-2017)

EDA Iteration steps

- Loading csv file and removing null columns(>30%)
- Drawing highlights (min, max, count() of relevant columns)
- Plotting map and marking terrorist attacks affected areas
- Plotting most affected regions
- Plotting most affected communities
- Country-wise analysis over the year (1970-2017)
- summary

Data Summmary

- iyear' : year of attack
- 'imonth' : month of attack
- 'iday' : day of attack
- 'country_txt : country
- 'region_txt' : region
- 'latitude' and 'longitude' : cordinates of area that was attacked
- 'summary' : brief description of what happened

Data Summary cont.

- 'attacktype1_txt' : means of attack
- 'targettype1_txt' : groups of people that were targeted
- 'weaptype1' : kinds of weapons used
- 'nkill' : no of people killed in attack
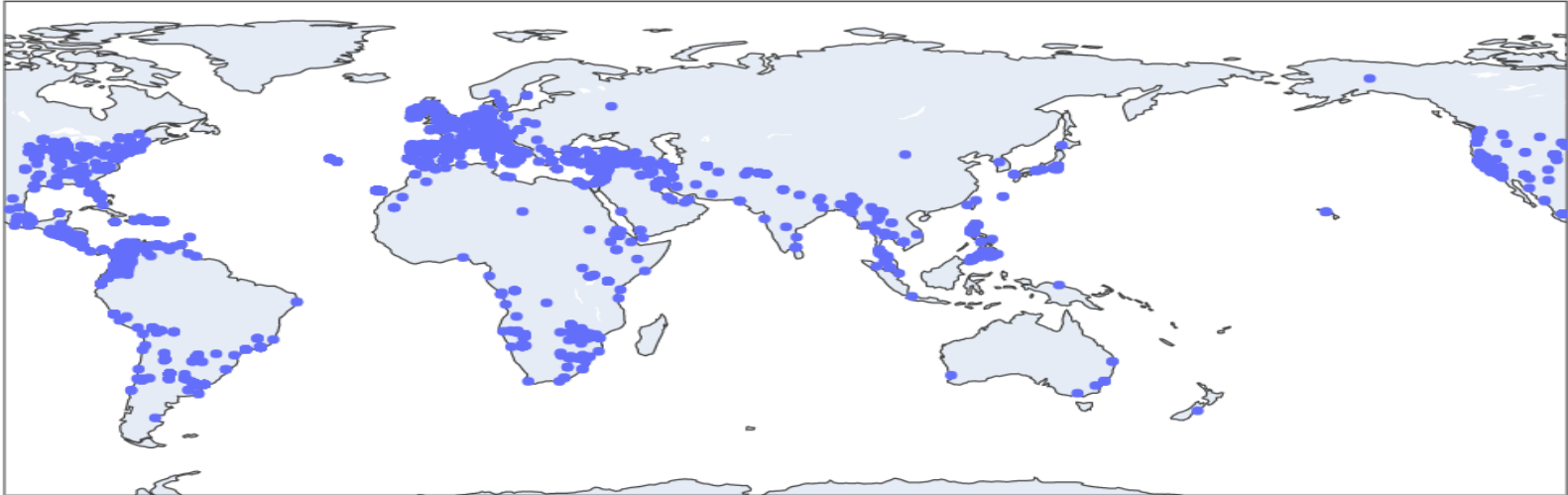- 'nwound' : no of wounded people

There were many columns other than these but I plotted only those I understood properly to do further analysis.

Structures used to get Insights

- Dataframes
- Countplots
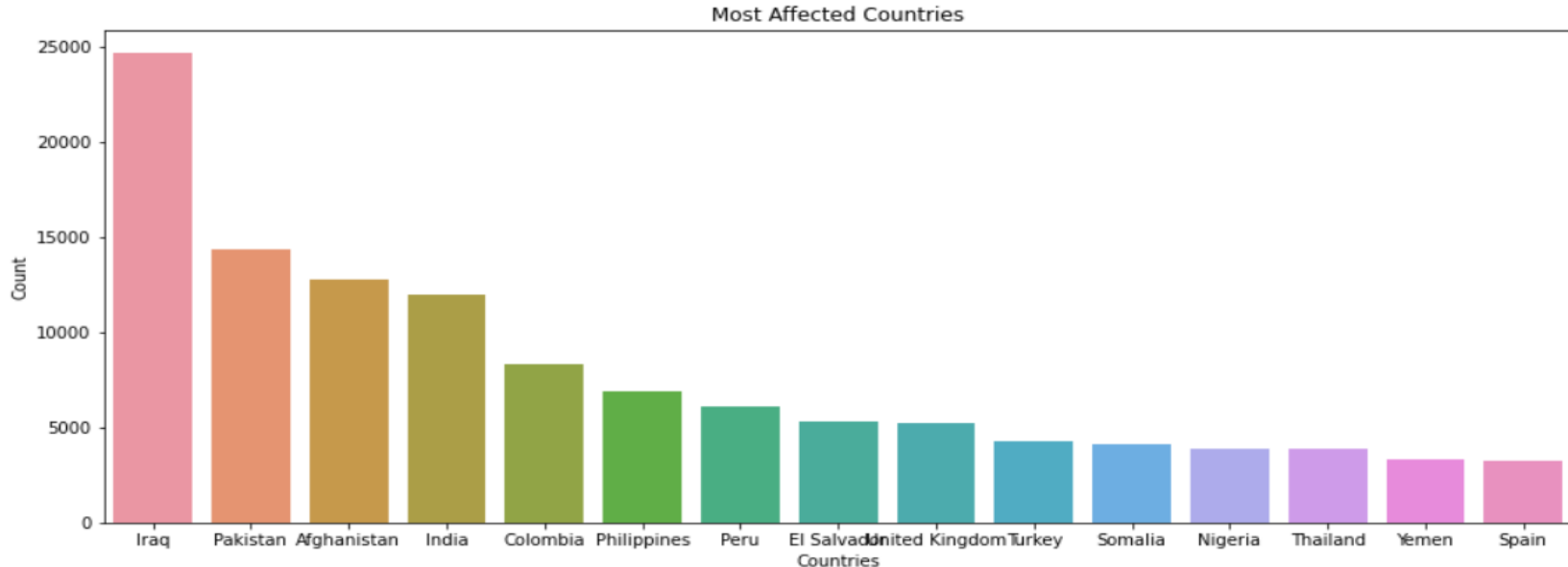- Barplots
- Map
- Word Cloud

Terror affected areas

The map is plotted using 'latitude' and 'longitude' features giving coordinated of areas attacked by terrorists.
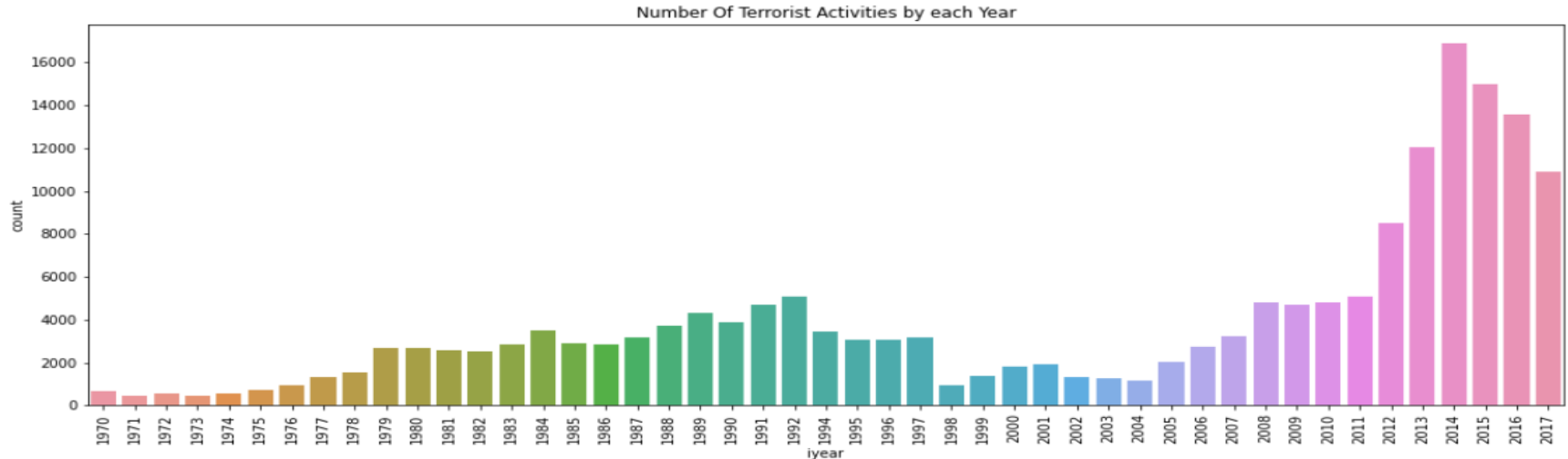
Most affected Countries

- Iraq, Pakistan, Afghanistan are among the countries where highest number of terrorist attacks happened'.
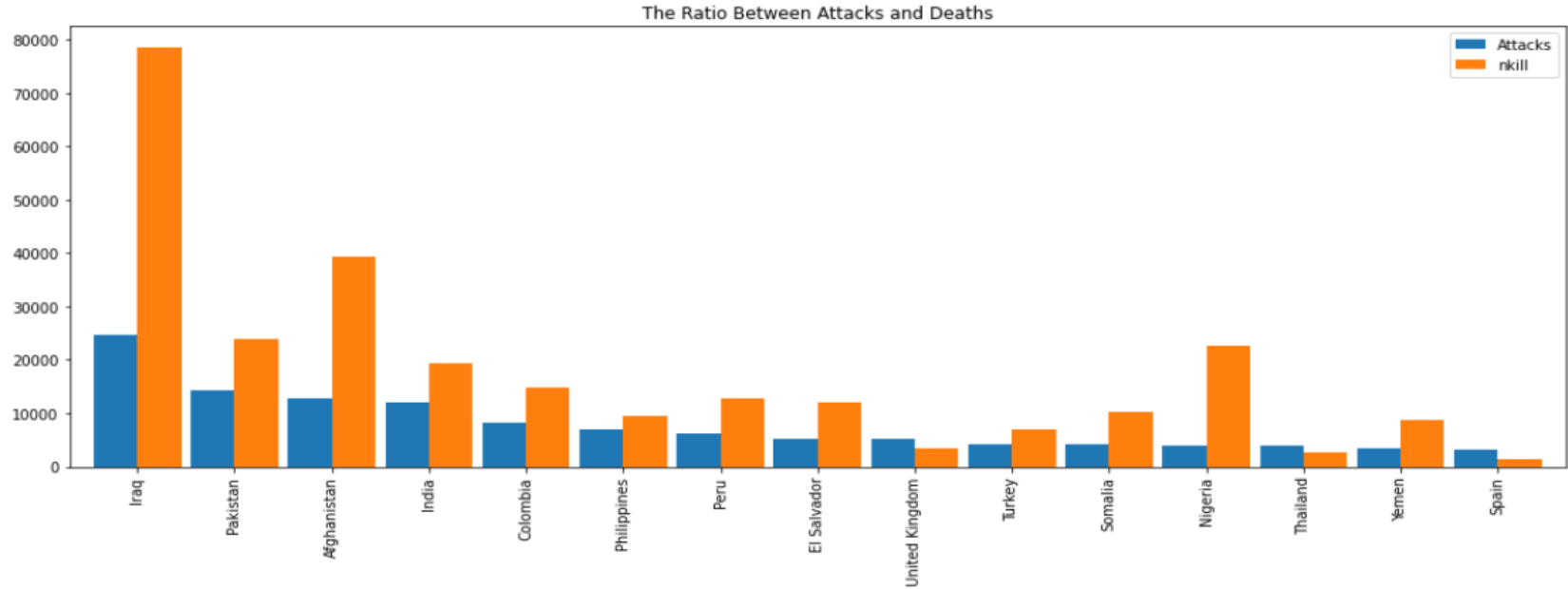

Most Affected Countries

Surge over the years

There is continuous surge in terrorist attack over the years except between 1998-2004 where there was a downfall in attacks
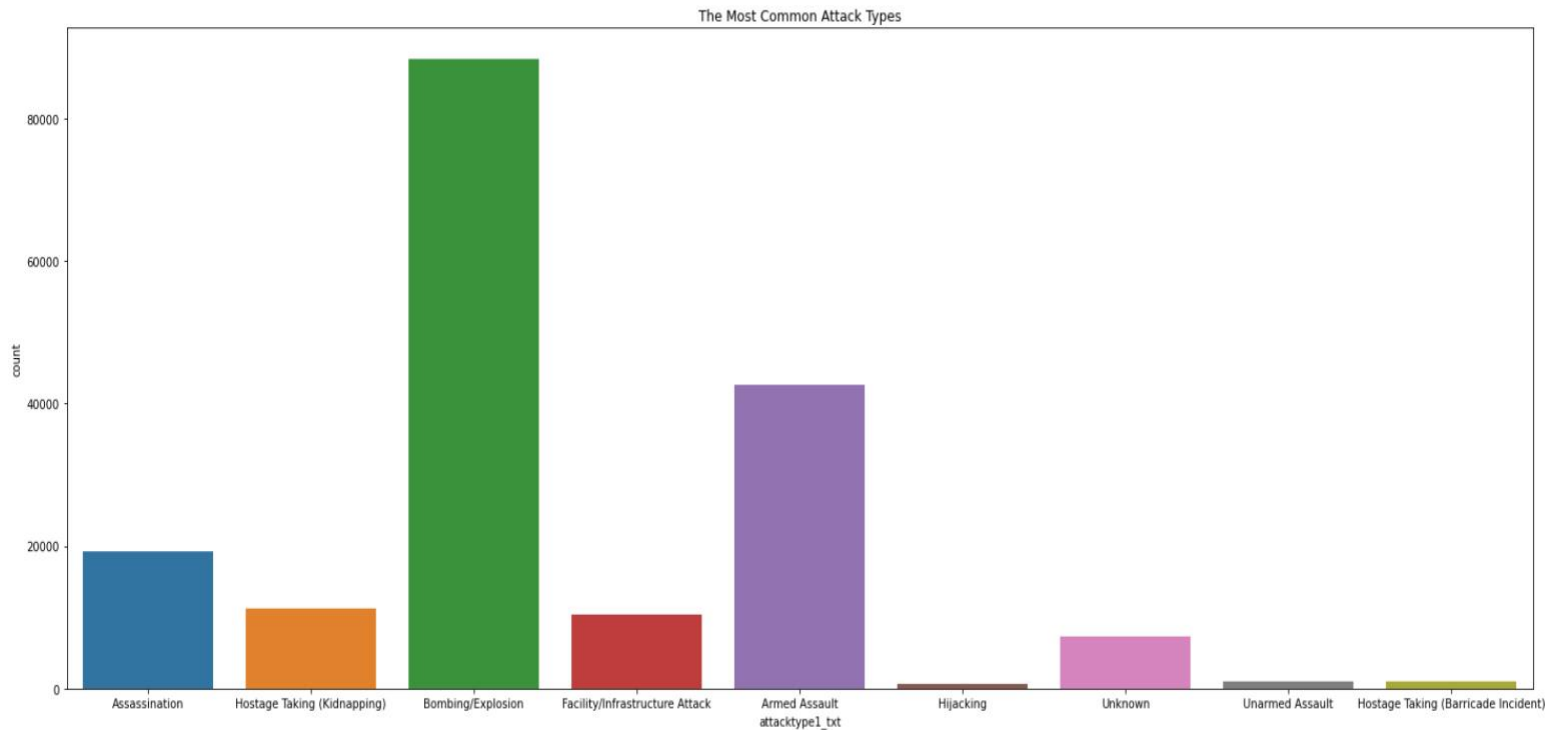

Number Of Terrorist Activities by each Year

Attacks vs Deaths

The Ratio Between Attacks and Deaths
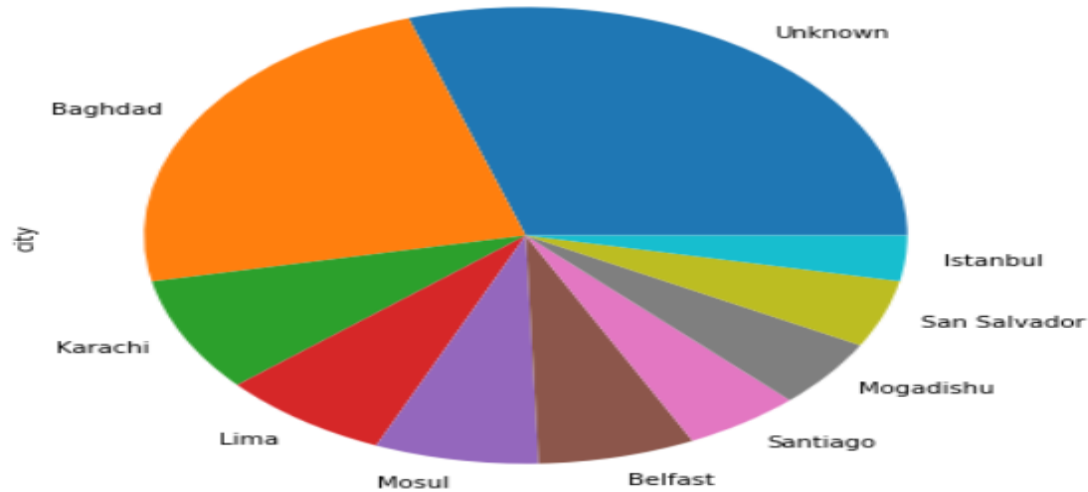
Attack methods

```
4   plt.show()
```


The Most Common Attack Types

Terror-Struck Cities

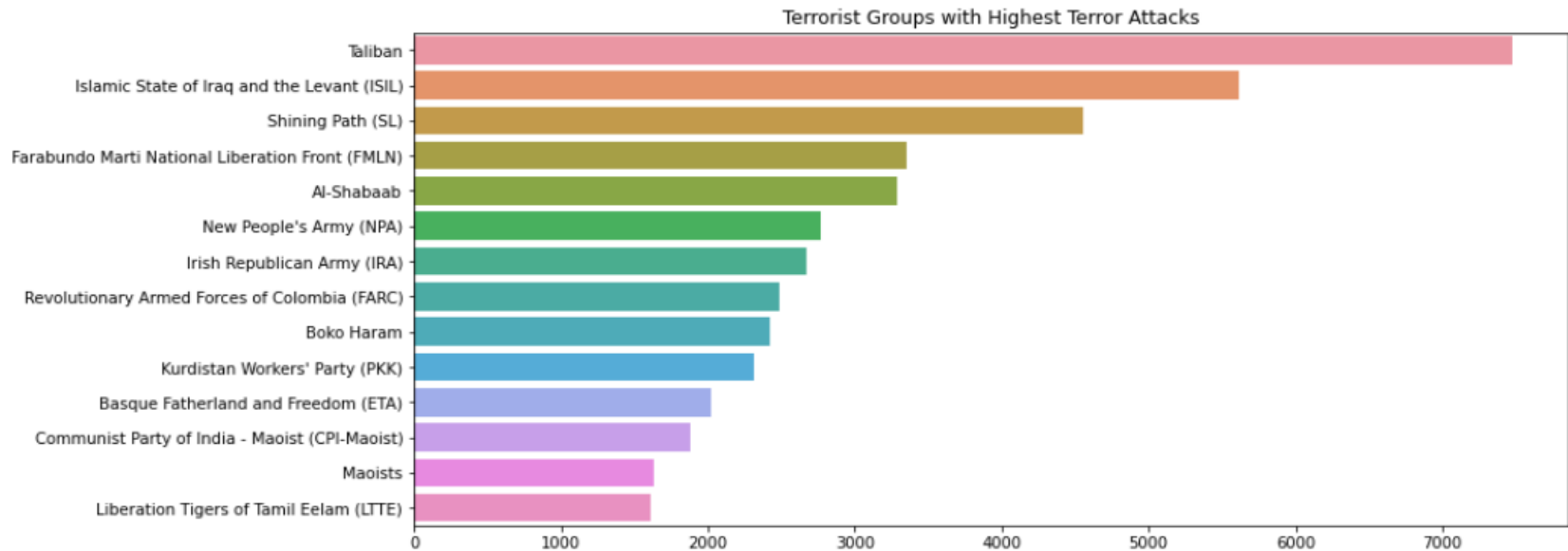Text(0.5, 1.0, 'Distribution of Wimbledon Victories 2015-2019')
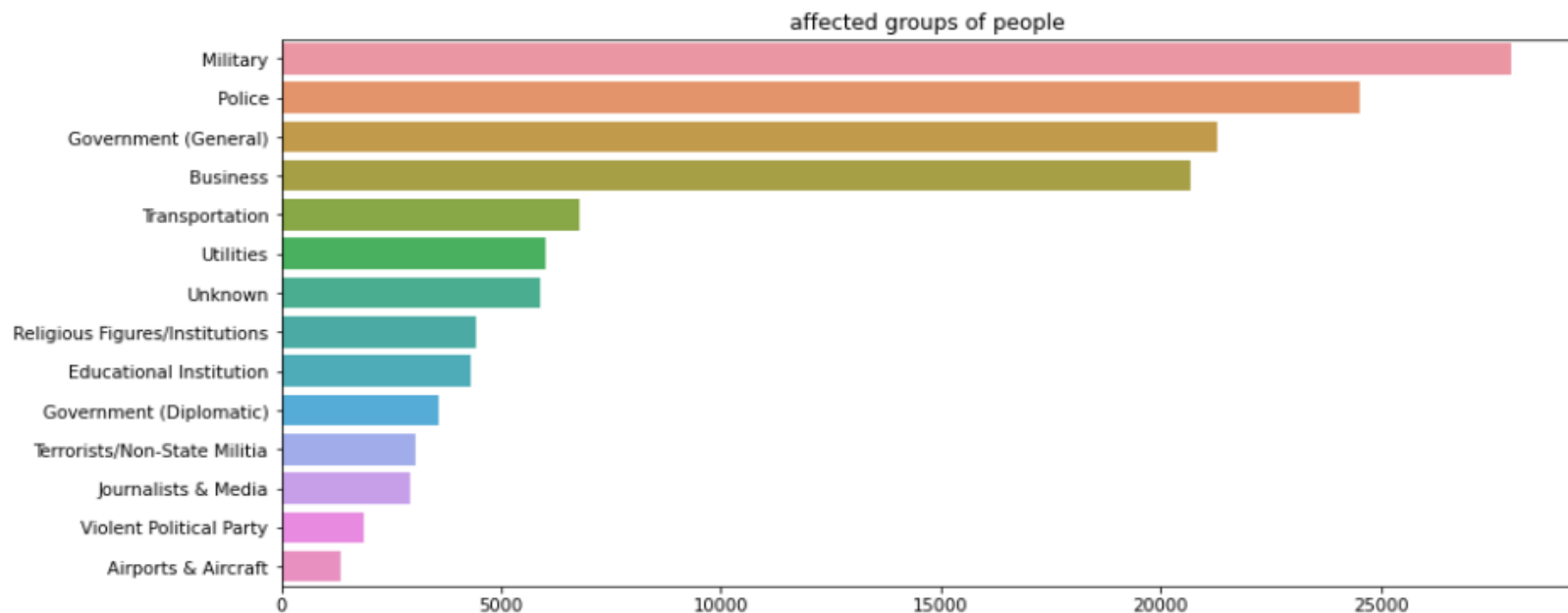Distribution of Wimbledon Victories 2015-2019

Terror groups

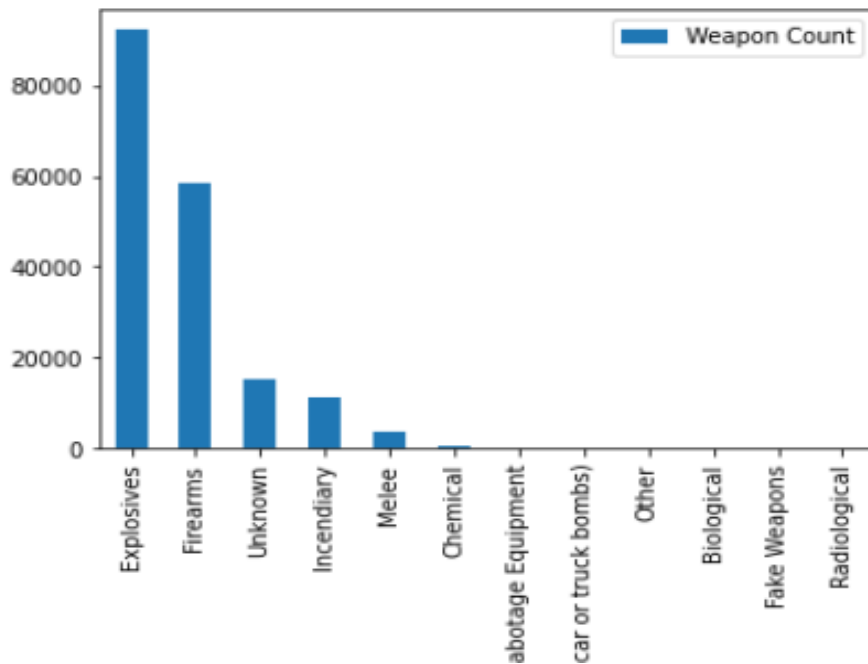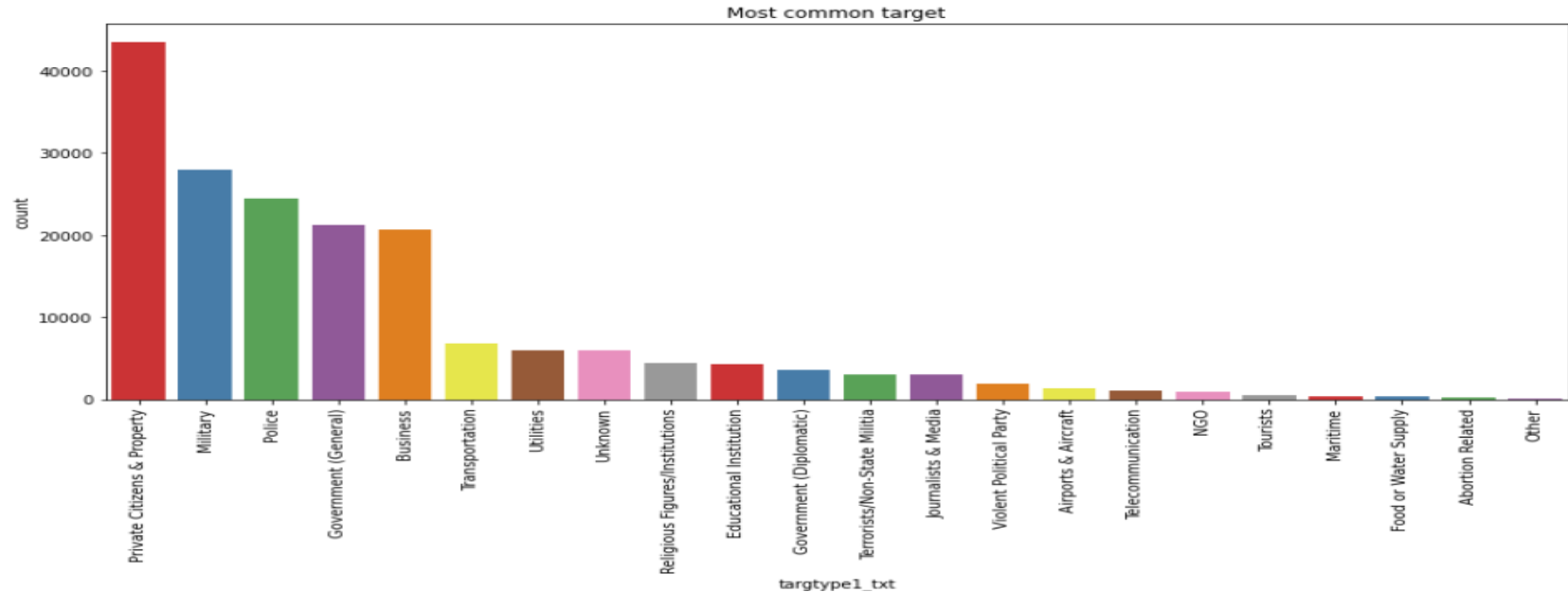Terror groups responsible for most of the casualties that happened

Terrorist Groups with Highest Terror Attacks

Affected groups of people

affected groups of people

Weapons

Weapon used	Weapon Count
Explosives	92426
Firearms	58524
Unknown	15157
Incendiary	11135
Melee	3655
Chemical	321
Sabotage Equipment	141
Vehicle (not to include vehicle-borne explosiv...	136
Other	114
Biological	35
Fake Weapons	33
Radiological	14

Commodities targated

Most common target

terror summary

Observations

- Terrorism has increased in drastic manner over the years
- Middle-East is the region most affected
- Iraq, Pakistan, Afghanistan are adversely affected by terrorism over the years
- People from military have lost their lives to terrorism
- Casualties are rising every year
- Explosives, Firearms are heavily used by terrorists

Conclusions

- Terrorism is becoming a matter of global concern as terror attacks are rising every year
- Firearms, explosives, illegal weapons were smuggled in large quantities over countries to carry out such devious acts
- Heavy loss in infrastructure has led to poverty leaving people homeless as private properties were destroyed most
- Refugee crisis

Challenges

- There were large no of columns and less information accordingly
- Columns were heavily filled with null values providing no information
- Feature names were not clear ,hence causing misinformation

Q&A