

# Capstone Project - 1

## Global Terrorism Analysis

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# Introduction

## Definition of Terrorism

*"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"*

Terrorism is the biggest hurdle to world peace. People believe in their own safety and most people do not want to be bothered by these problems.

The objective of this work is to analyse the region and country of a terrorist attack using exploratory data analysis.



# Steps Involved in Exploratory Data Analysis

## 1. Project Structure

It includes the overall design plan of analysis which explains how each parameter is correlated with others.

## 2. Data Cleaning

Dataset contains 135 columns in which there are lot of missing values and more numbers of columns are irrelevant. Removing rows with greater than 50% null values and rename the required columns.

## 3. Analysis

This section consists of details regarding the visual results.

# Data Summary

**Target\_type:** Type of target involved in the attack. it consists of categorical values like private citizens, military, police, government officials, transportation, education, religious institution, airports, etc.

**AttackType:** The type of attack happened. it consists of categories like explosion, armed assault, assassination, kidnapping, unarmed assaults.

**Killed:** Number of people killed in any event

**Wounded:** Number of people wounded in any event Organization that claimed responsibility of an attack.

**Weapon\_type:** Type of weapon used in the attack. Weapon\_type contains values like firearms, explosives, melee, vehicles etc.

## Data Summary(Continued)

**Region:** Name of the region where the attack happened. Region consists values like East Asia, South Asia, Western Europe, etc

**Latitude:** latitude of the location.

**Longitude:** longitude of the location.

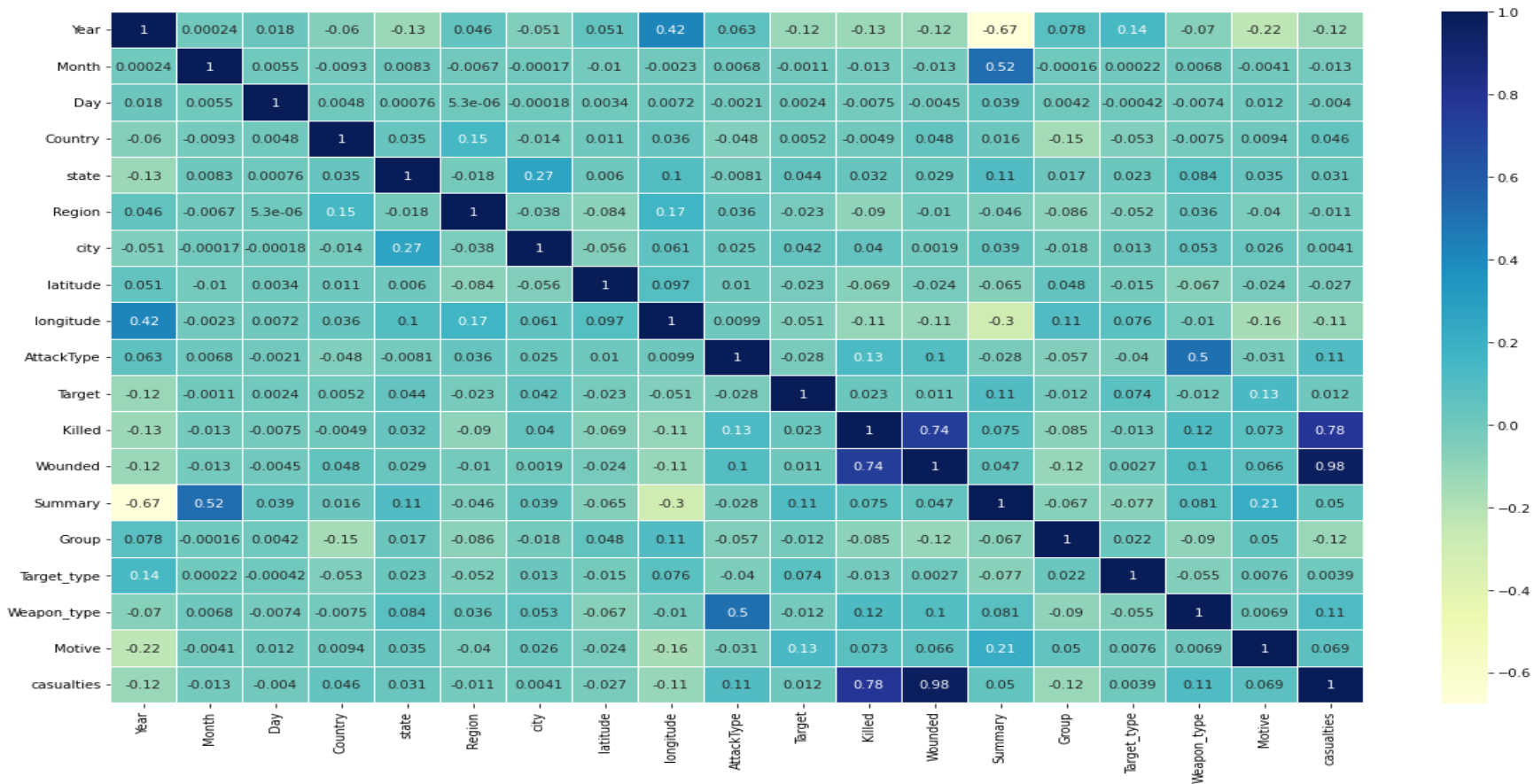
**Group:** Name of group involved in terrorist attacks.

**Country:** Name of country where attack done.

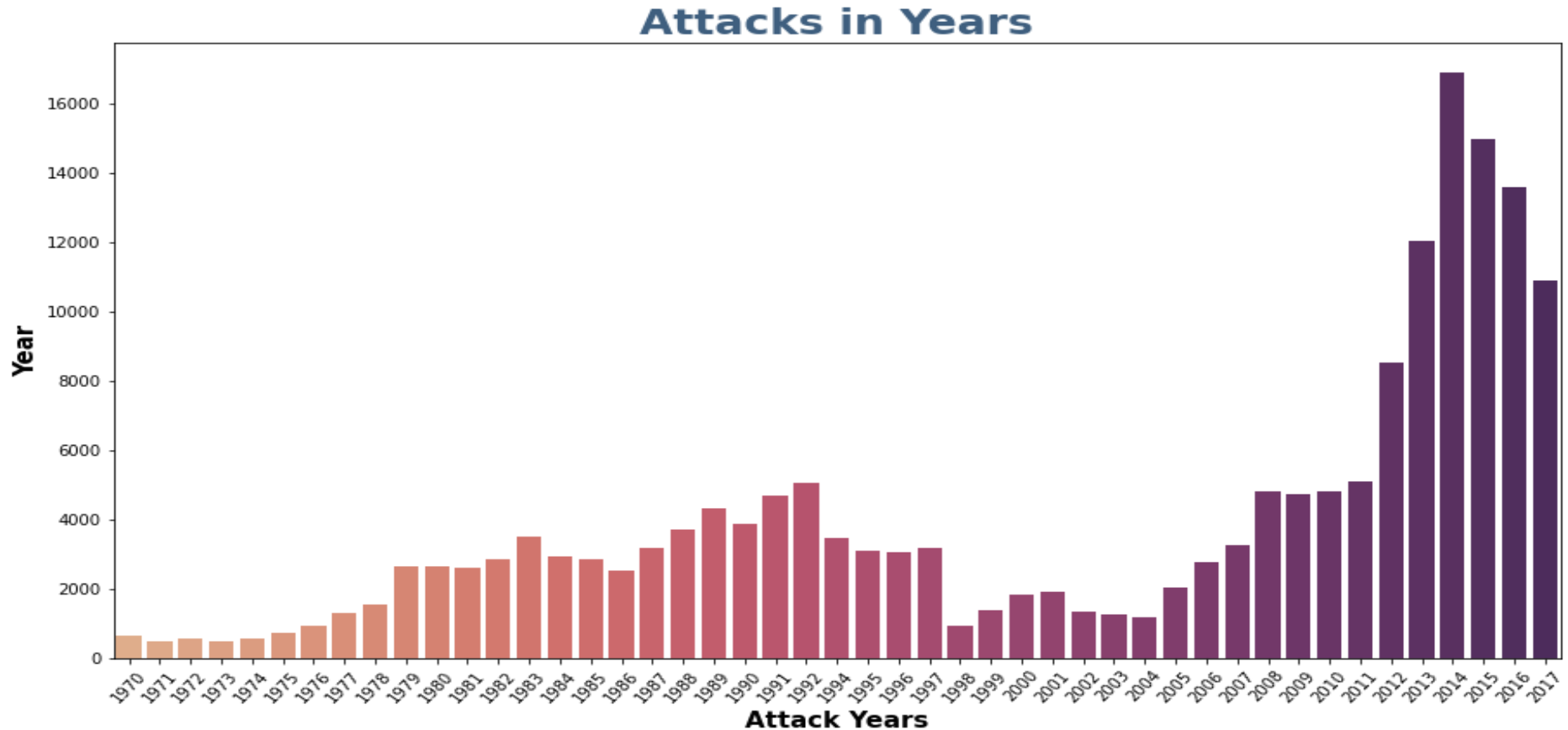
**Day, Month, Year:** Calendar details of the events.

**Casualties:** It containing the sum of the values of total people killed and wounded.

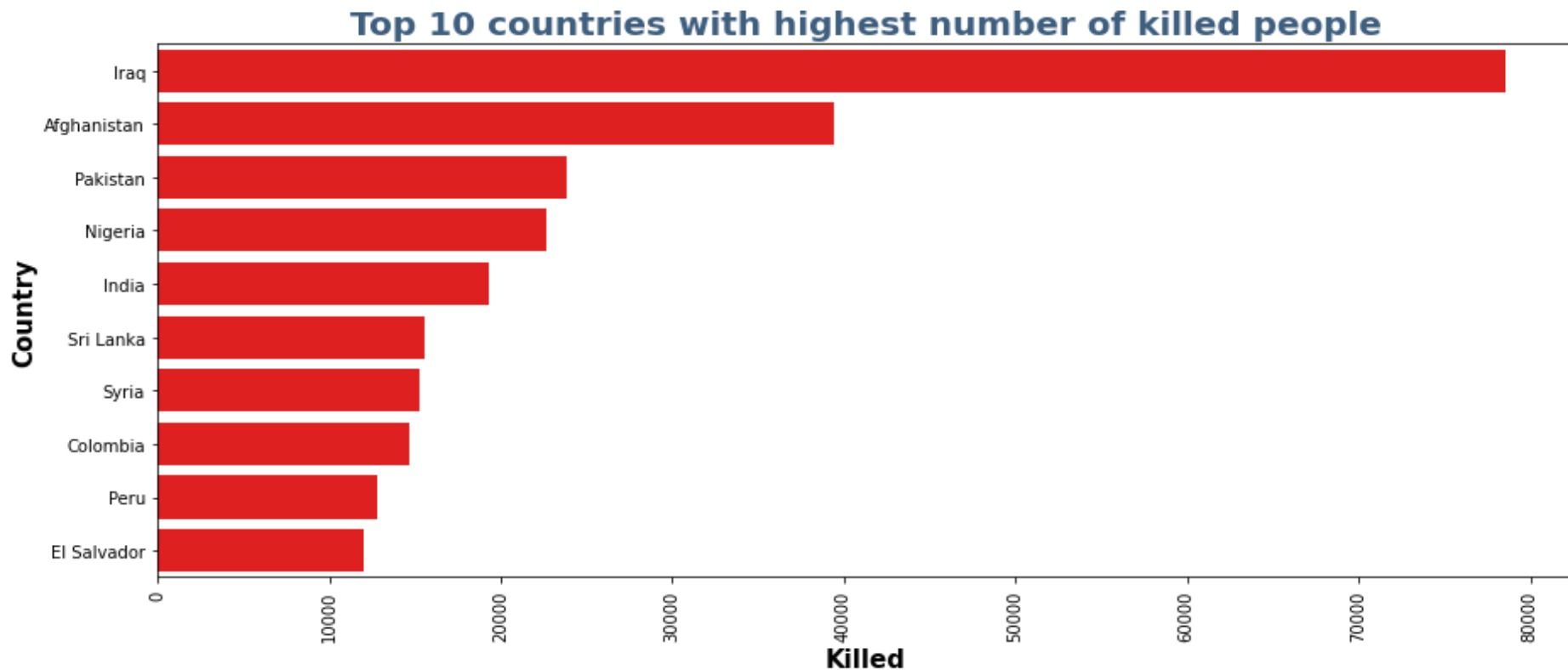
# Correlation Matrix



# Terrorist Activities Each Year



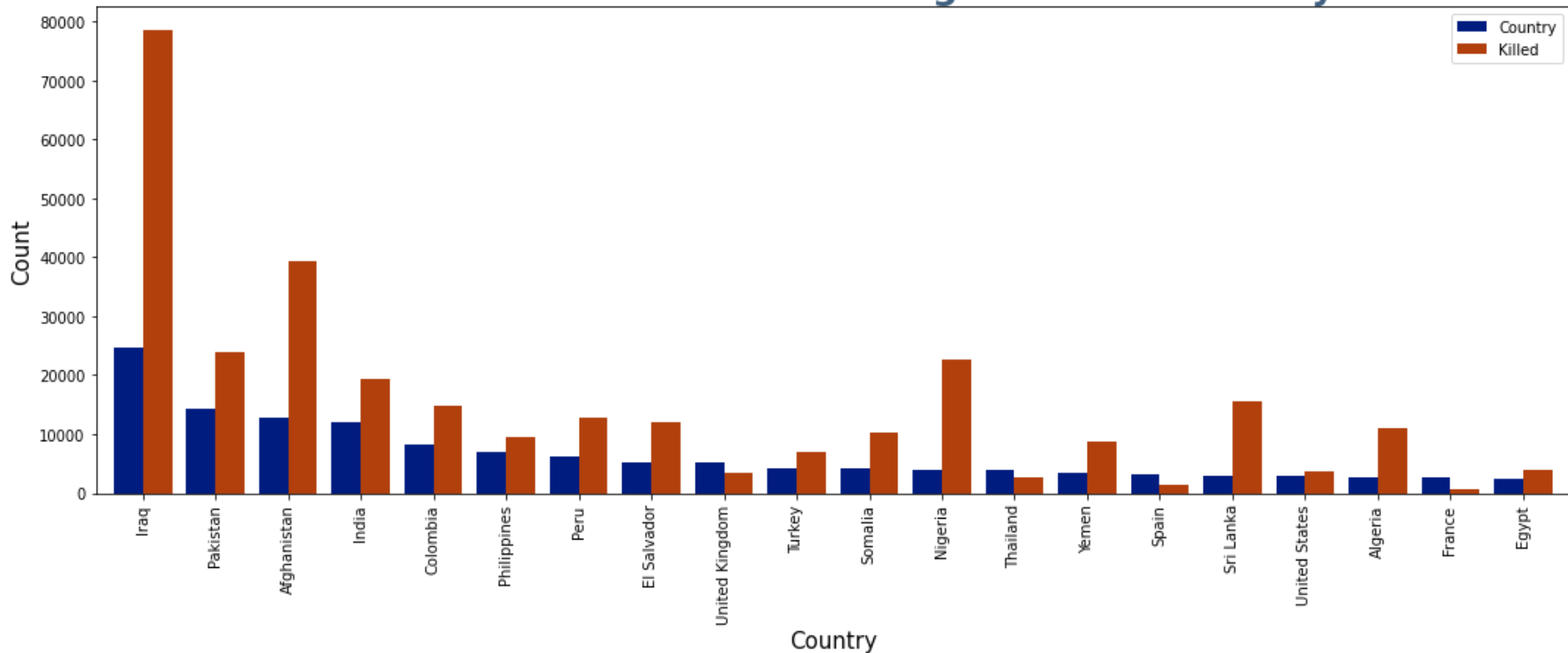
# Highest Numbers of Killed People in Top 10 Country





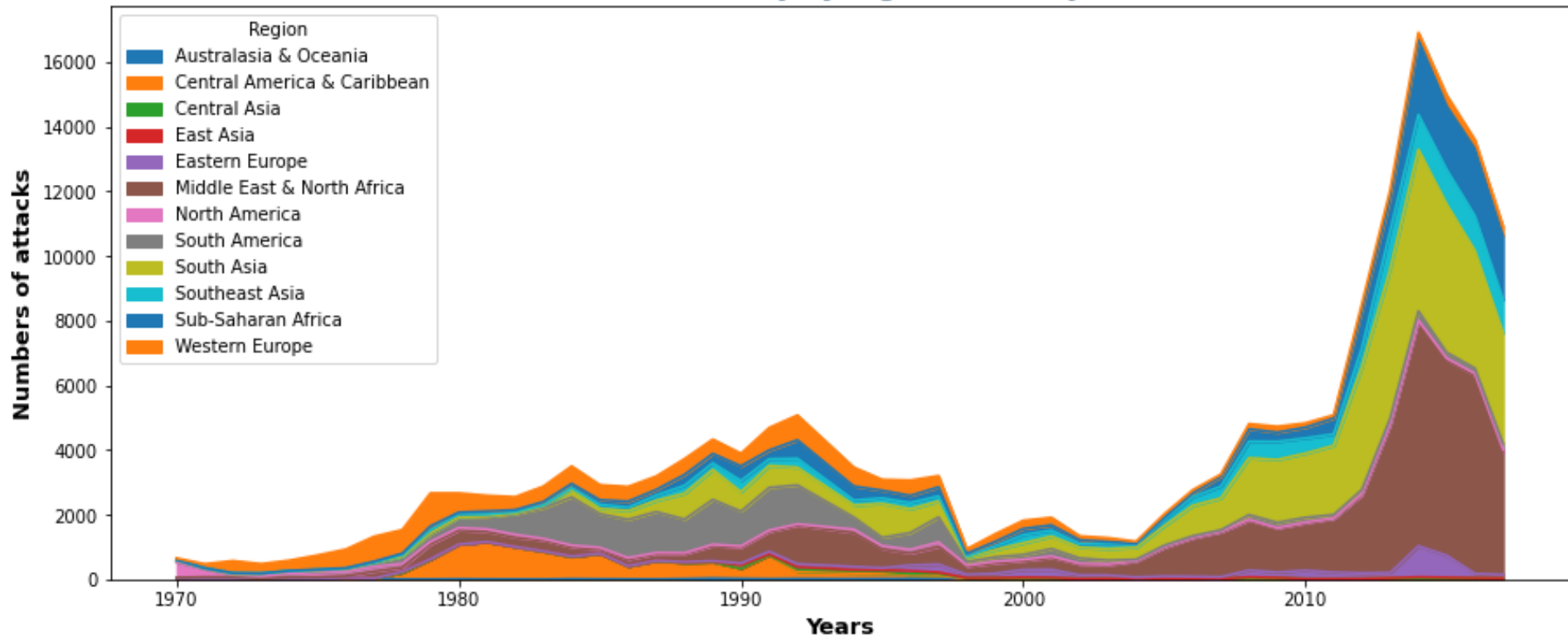
# Numbers of Attacks with killings for country

Numbers of attack with killings for each country



# Terrorist Activities in Each Region

Terrorist activity by region in each year

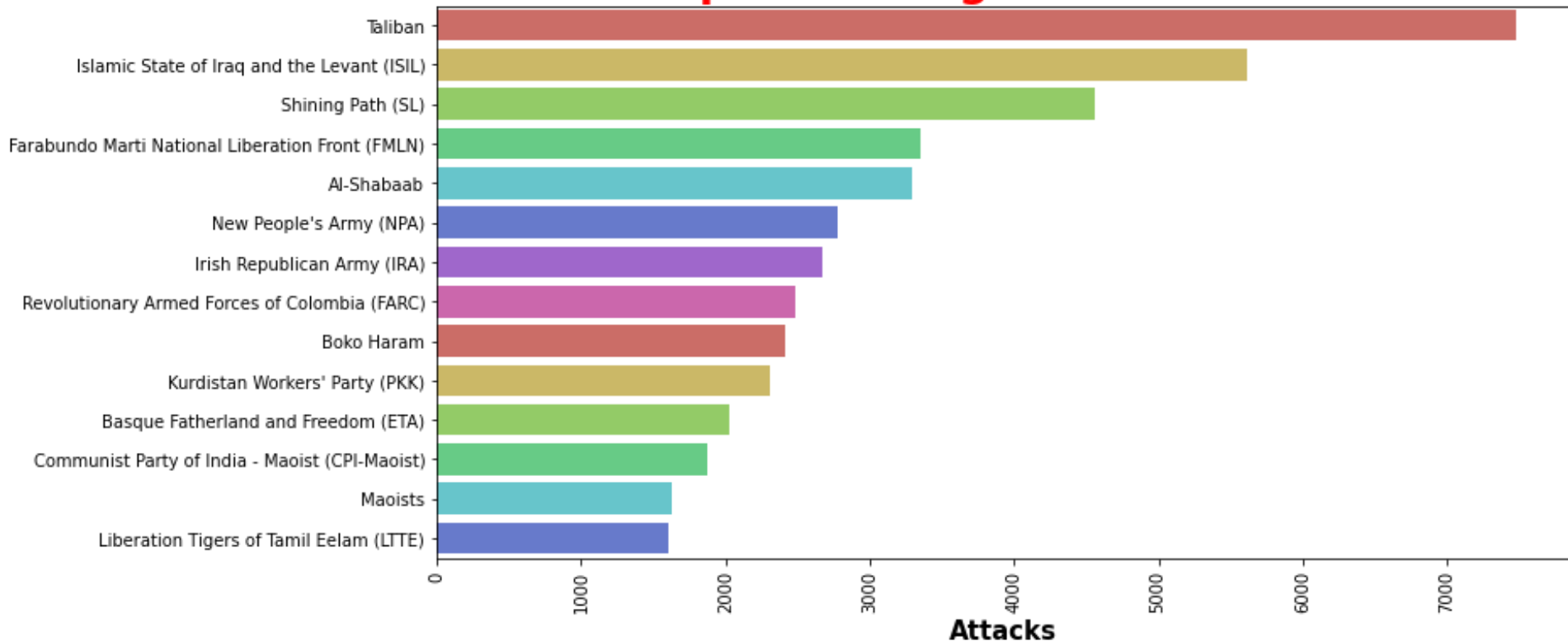


# Safest Country From Terrorist Attack i.e. 0 People Killed

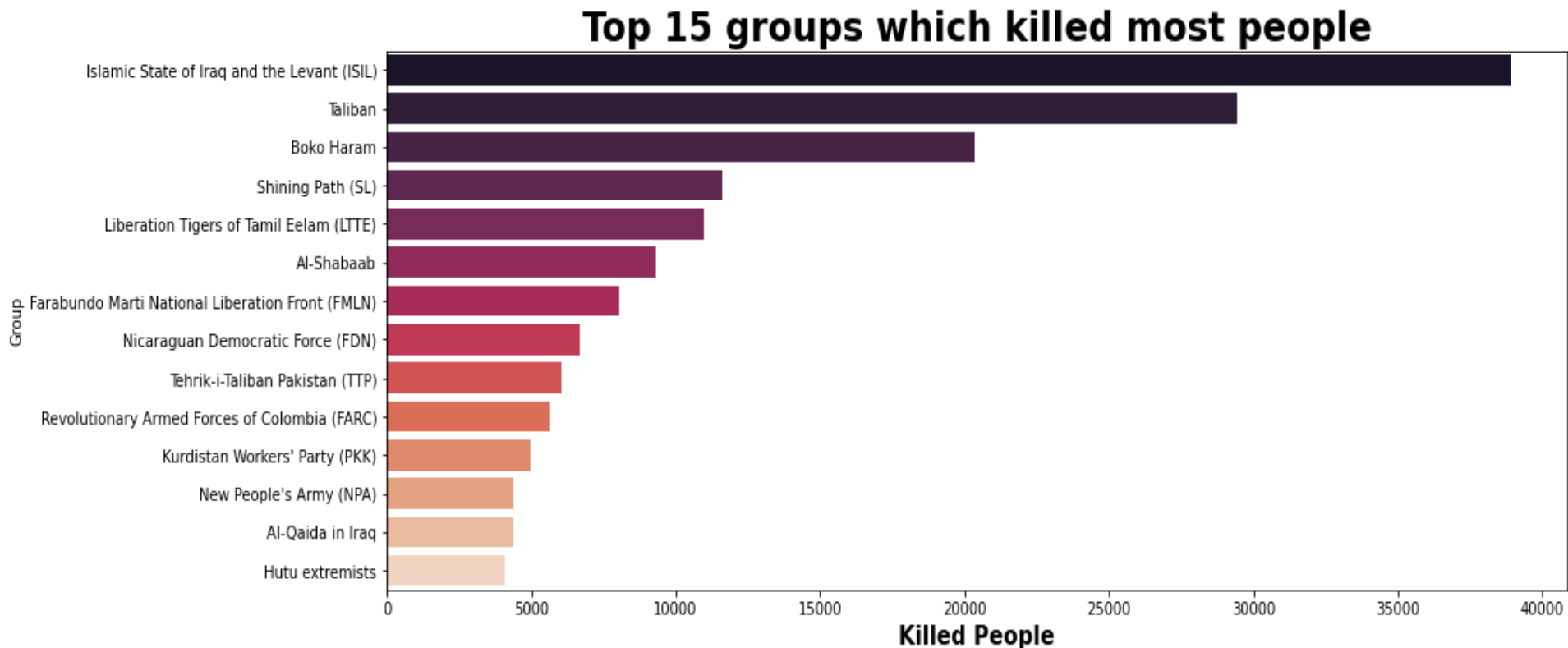
```
['French Polynesia',  
 'Benin',  
 'Seychelles',  
 'New Hebrides',  
 'South Yemen',  
 'Vatican City',  
 'Vanuatu',  
 'Iceland',  
 'Luxembourg',  
 'Martinique',  
 'Mauritius',  
 'Antigua and Barbuda',  
 'St. Kitts and Nevis',  
 'Andorra',  
 'Falkland Islands',  
 'Wallis and Futuna',  
 'Brunei']
```

# Groups Involved Most in Terrorism

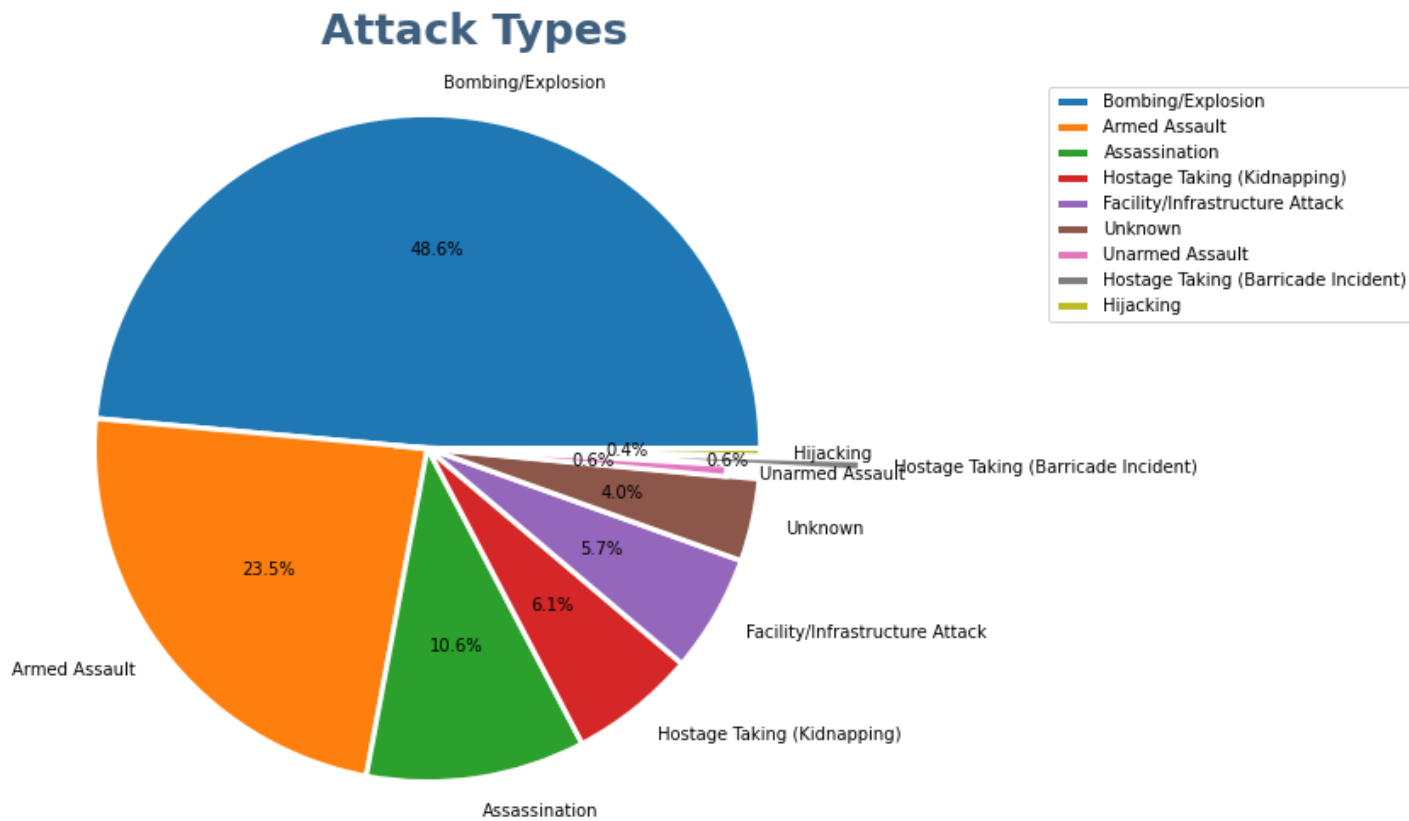
## Groups Involving Most In Terrorism



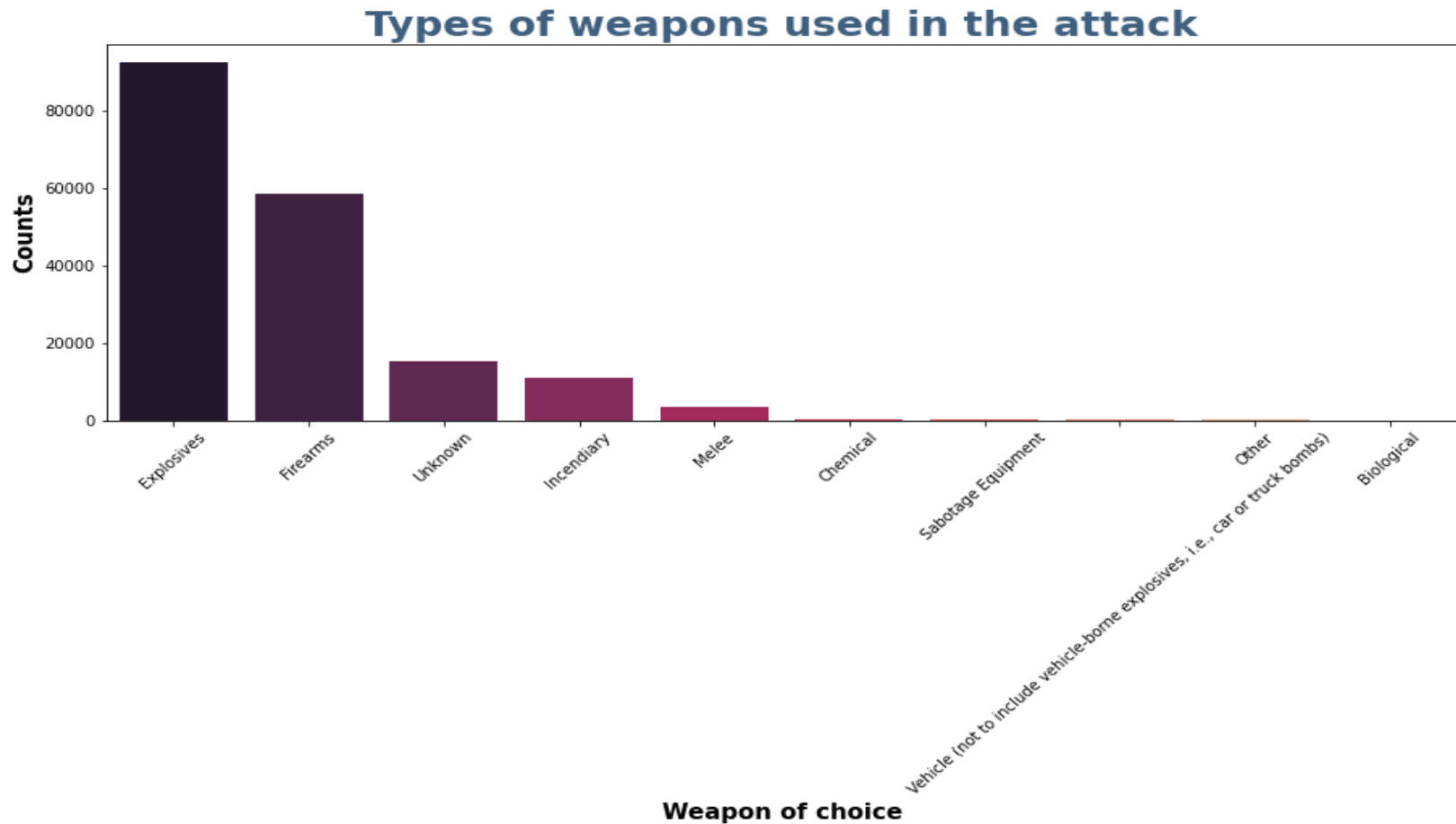
# Top 15 Groups Which killed Most People



# Attack Types

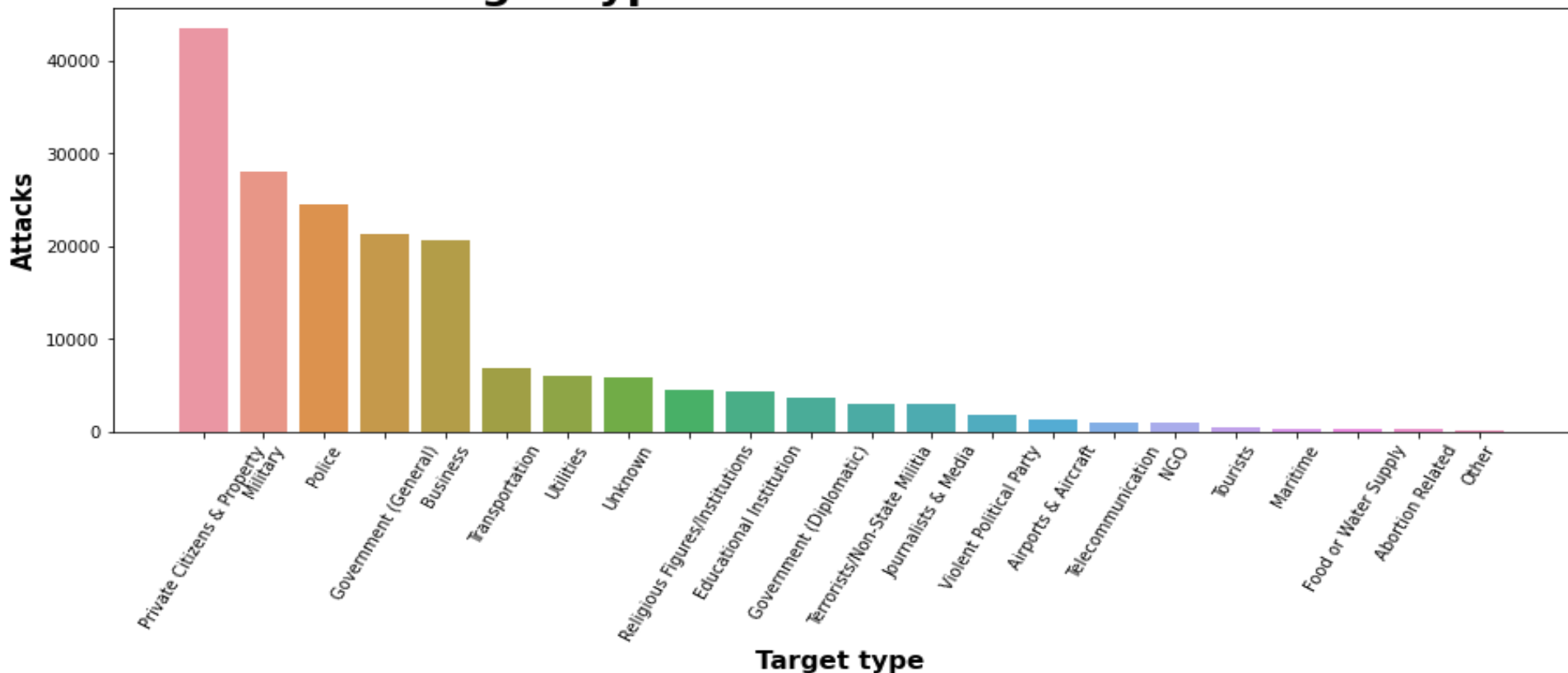


# Types of Weapons in Attacks



# Target Types with Numbers of Attacks

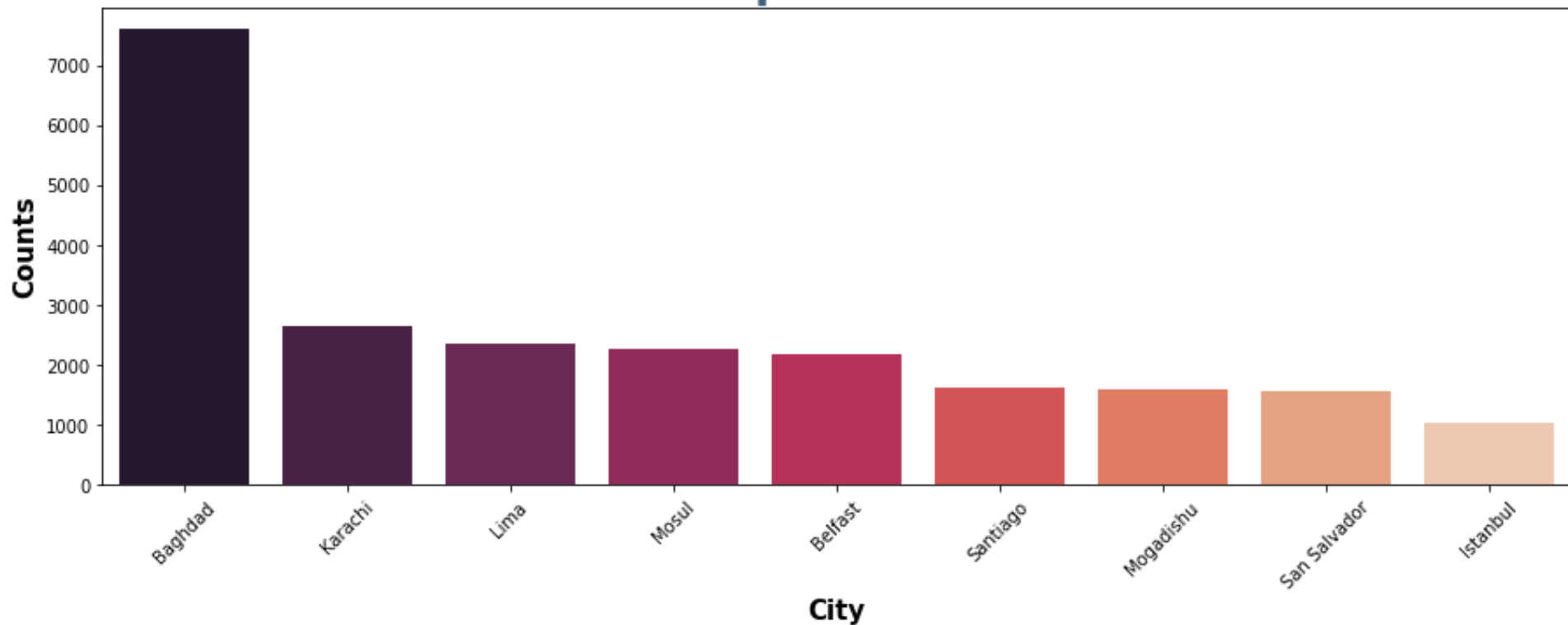
Target type with numbers of attack





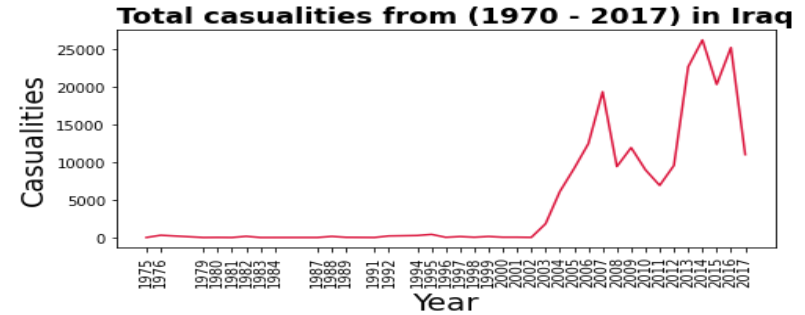
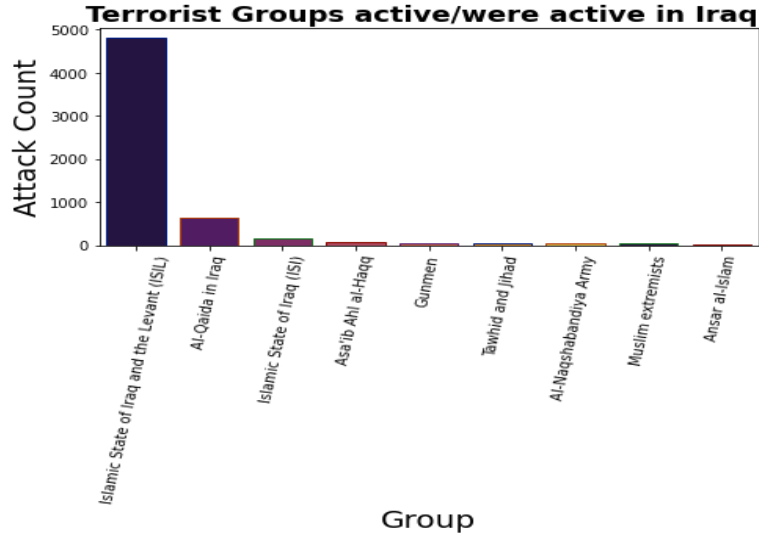
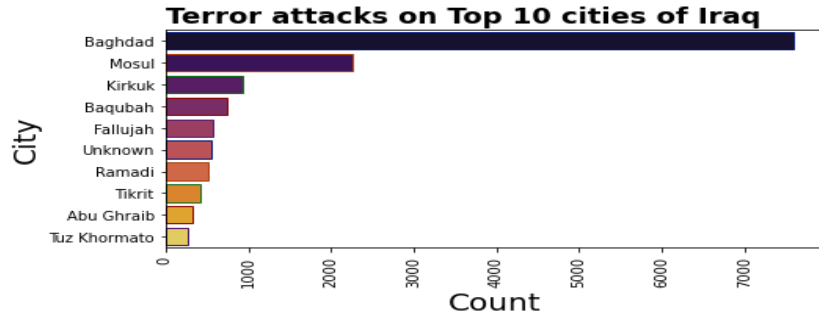
# Most Attacked Top 10 Cities

## Most Attacked Top 10 Cities in The World



# Country wise Analysis

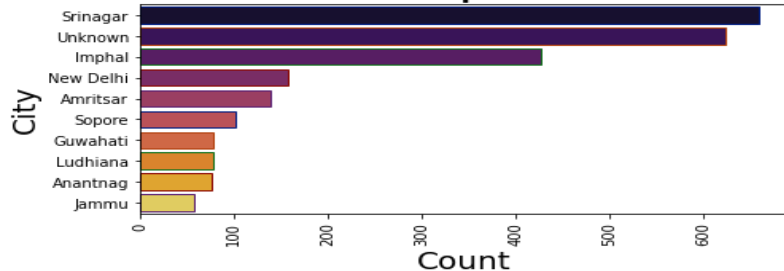
## Country- Iraq



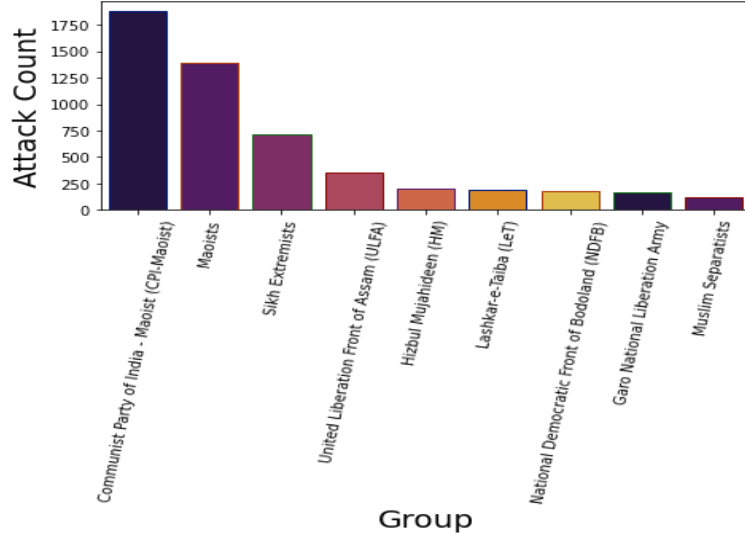
# Country wise Analysis(Continued)

## Country- India

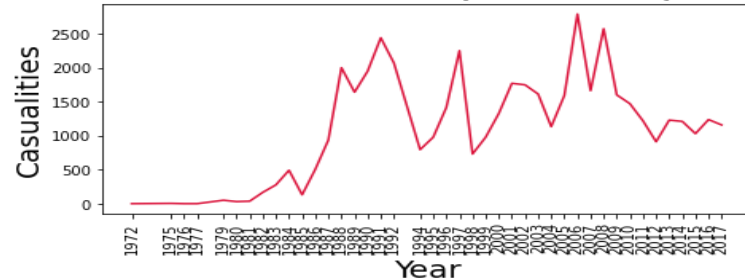
**Terror attacks on Top 10 cities of India**



**Terrorist Groups active/were active in India**

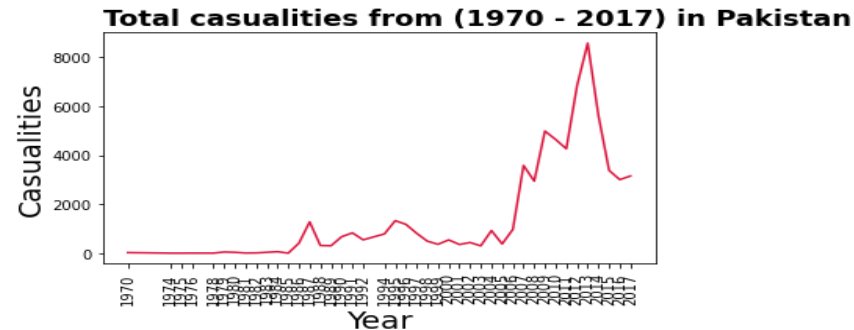
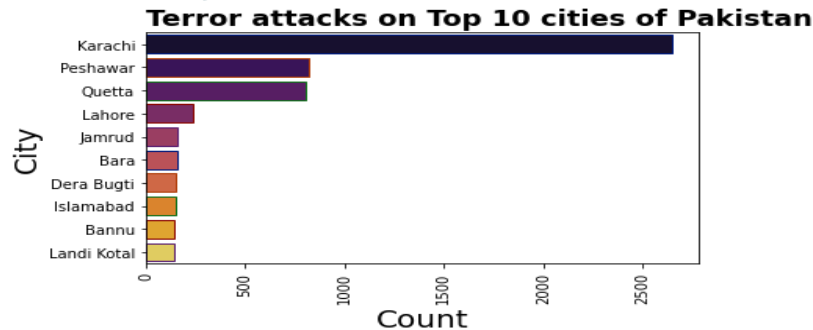


**Total casualties from (1970 - 2017) in India**

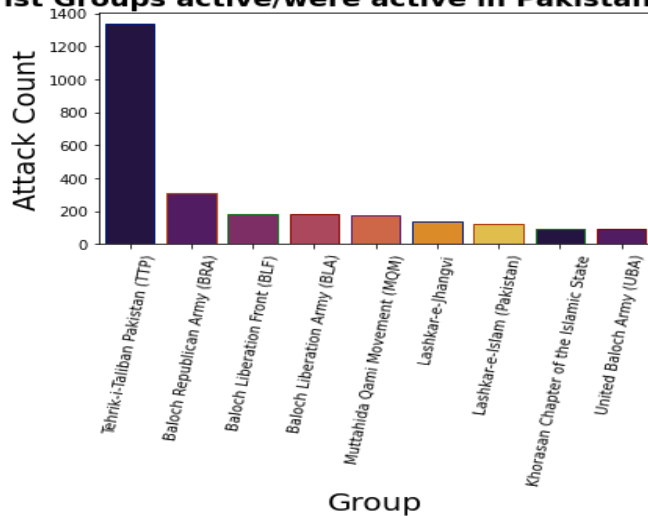


# Country wise Analysis (Continued)

## Country- Pakistan

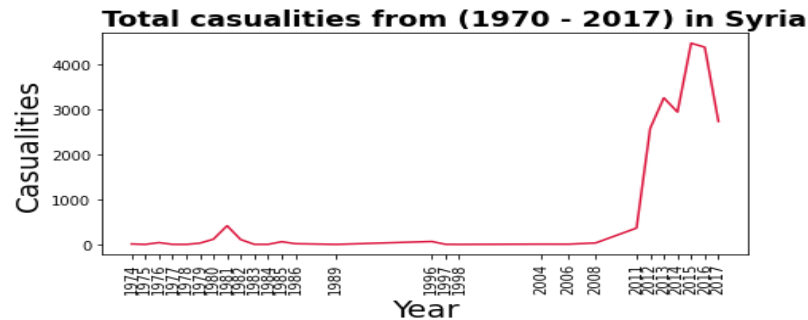
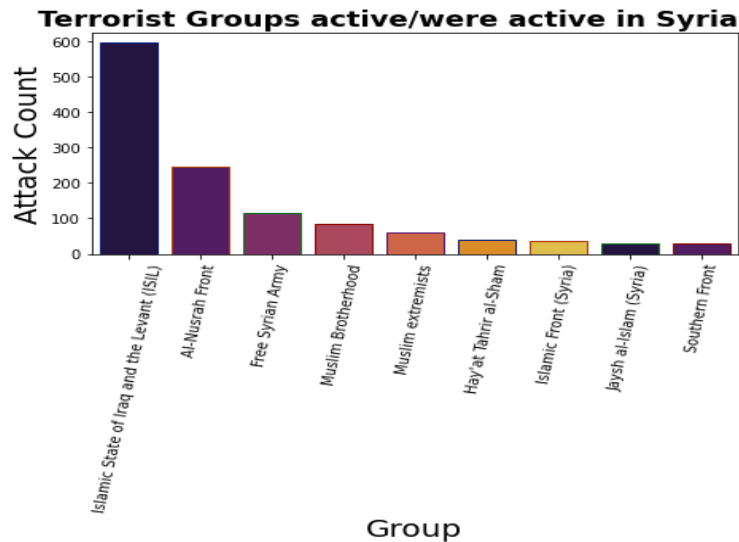
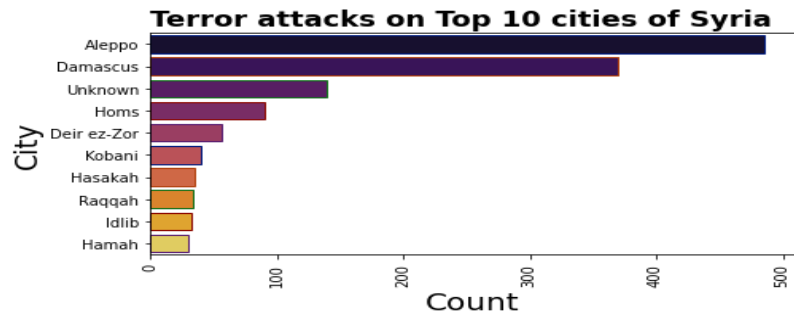


### Terrorist Groups active/were active in Pakistan



# Country wise Analysis

## Country- Syria



# Challenges

- **Data Cleaning**
- **Individual Studies lead to different conclusions.**
- **Lack of Clarity in Data**

# Conclusion

- It was clear that numbers of terrorist attacks were increases from 2002-2004. Most of the attacks were done on year 2014.
- Iraq is the most affected country from terrorism because most of the peoples killed in Iraq. In Iraq maximum of 1570 peoples killed in single attack.
- Middle east and north Africa have the highest number of attacks followed by South Asia and South America. Terrorism here does not show an equal distribution among all regions.
- Taliban is the most active terrorist group in the world.
- Private Citizens and property military is the most target type as per the dataset.
- It seen that explosives were used in around 48.6% of the attacks, followed by Armed Assault accounted for 23.5% of the attacks.

**Thank You**