Capstone Project-1
Global Terrorism Analysis

Team name- **Data Newbies**

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OVERVIEW:

- This study examines the difficulties that the world encountered from 1970 to 2017. The Global Terrorism Analysis Project is the most crucial information regarding the terrorist operations occurring around the world is revealed by this research. Even though this study only includes data from 1970 to 2017, it nonetheless generated a lot of information regarding the current terrorism situation. Unfolding the project and discovering the interesting data it has presented in a concise and understandable manner.

- The goal of this project is to analyse terrorist incidents that occurred worldwide between 1970 and 2017.

- To recognize and emphasize the geographic and temporal trends in terrorism.

- To identify the key factors that contribute to a successful terrorist assault.

- To give the user the most interactive ability to alter the analysis and study the data.

- The project's goal is to understand how terrorism has evolved in the West and whether we should erect high barriers to defend ourselves from potential threats. We decided to focus on a more universal issue since It makes it possible to aggregate data at many different geographic scales, including the world, regions, nations, states, and towns. It has a wide range of interesting characteristics and is quite diverse.

Year wise Attacks:
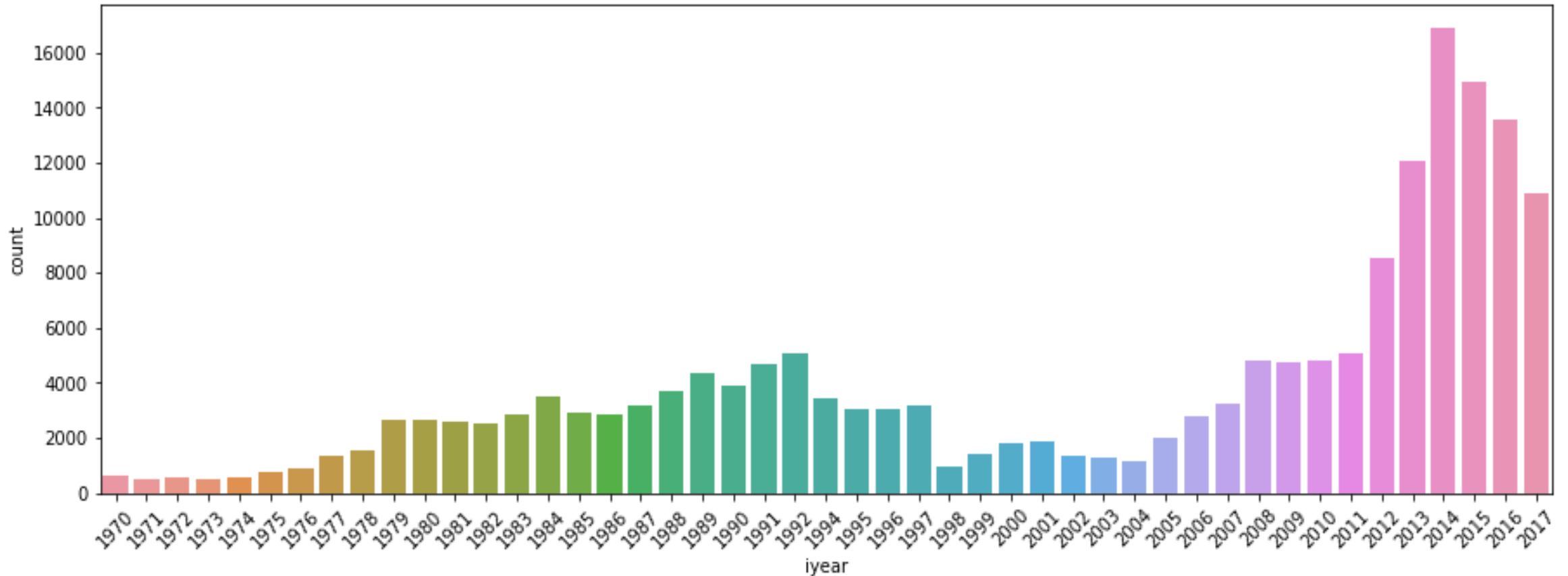
- From 1970 to 2017, the number of attacks is depicted in the bar diagram above.
- From the graph we can analyze that 1971 has lowest number of terrorist attacks and year 2014 has highest number of attacks.
- From year 2014 the attacked rate is gradually decreased.

Month wise Attack:
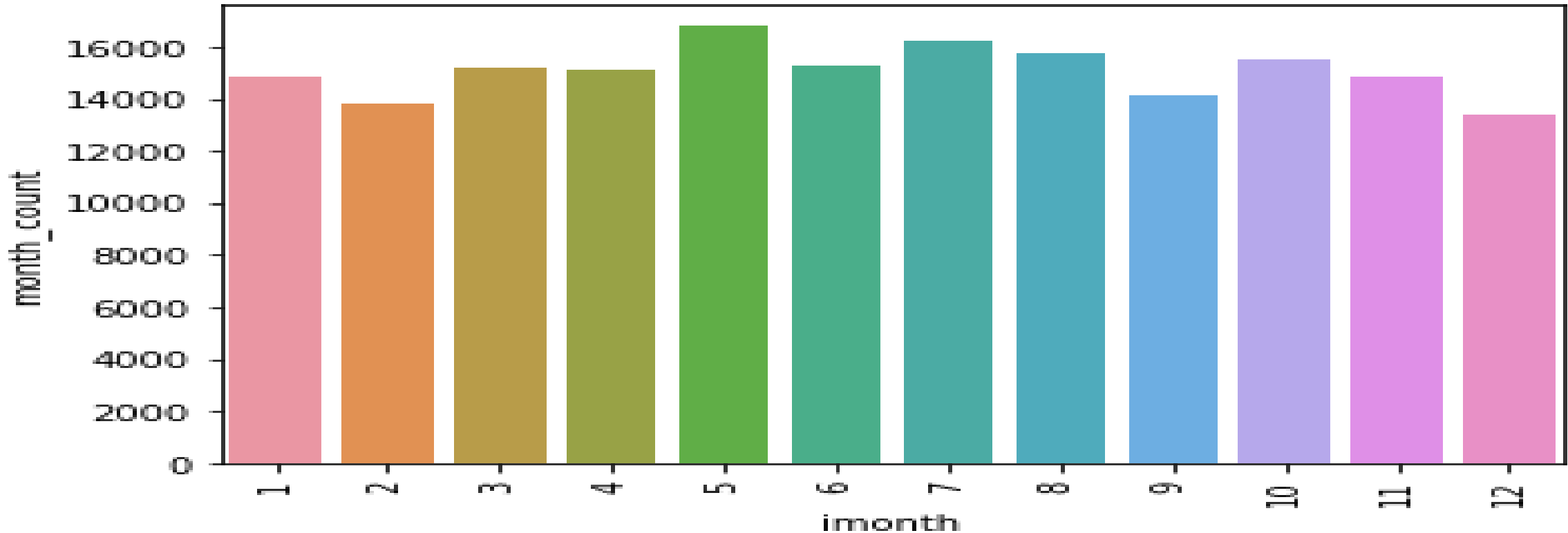
- The Bar graph shown above is depicting no. of attacks occurred in the different months through out the year.
- From the diagram we can visualize that in month of May more attacks occurred followed by July as compare to other months of the year.

Attacks in different region

Region wise attacks
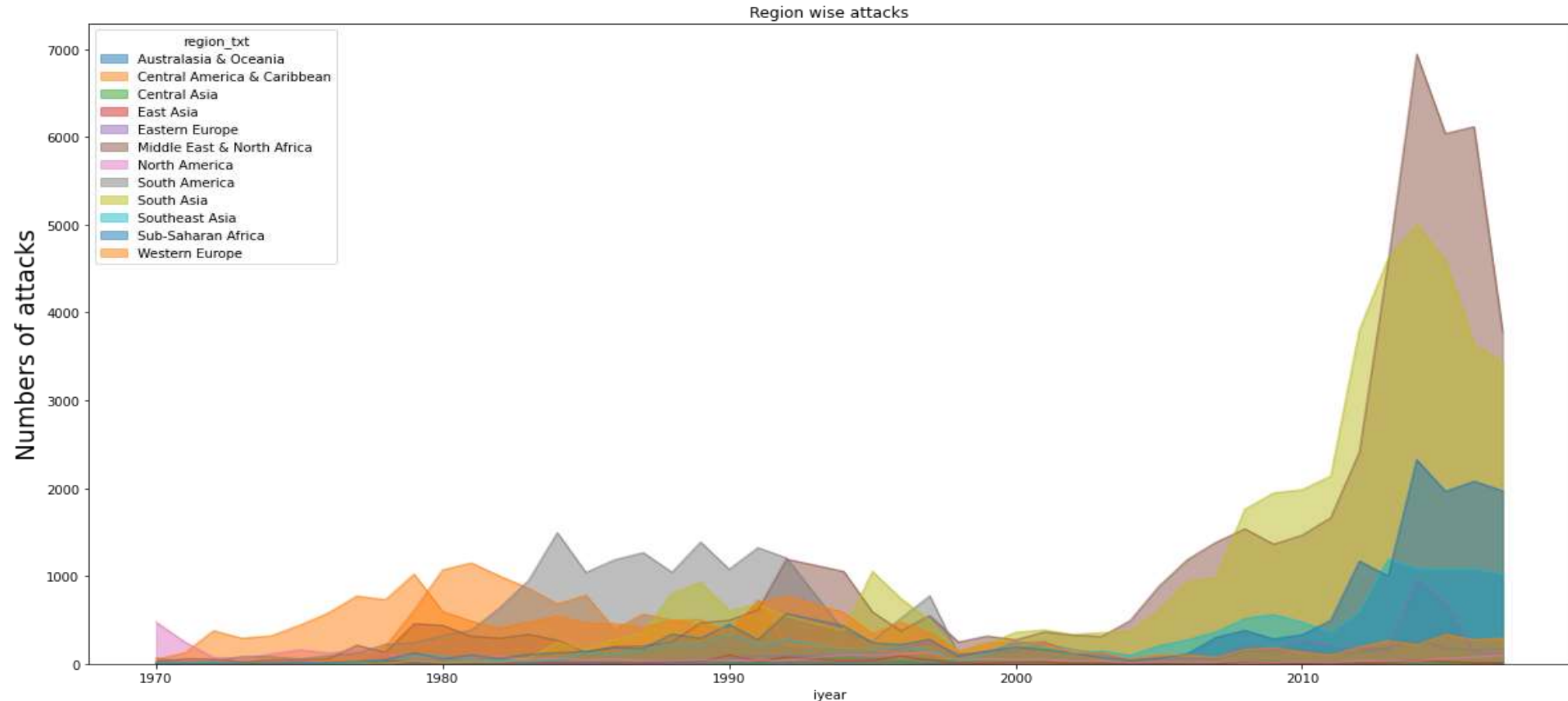
- **The above graph shows the most number of attacks occurred in different regions of the world.**
- **From the graph we can clearly visualise that Middle East and North Africa has highest number of attacks followed by South Asia.**
- **While East Asia has least number of attack in compare to North America.**

Attacks in countries and cities:

Attacked in countries
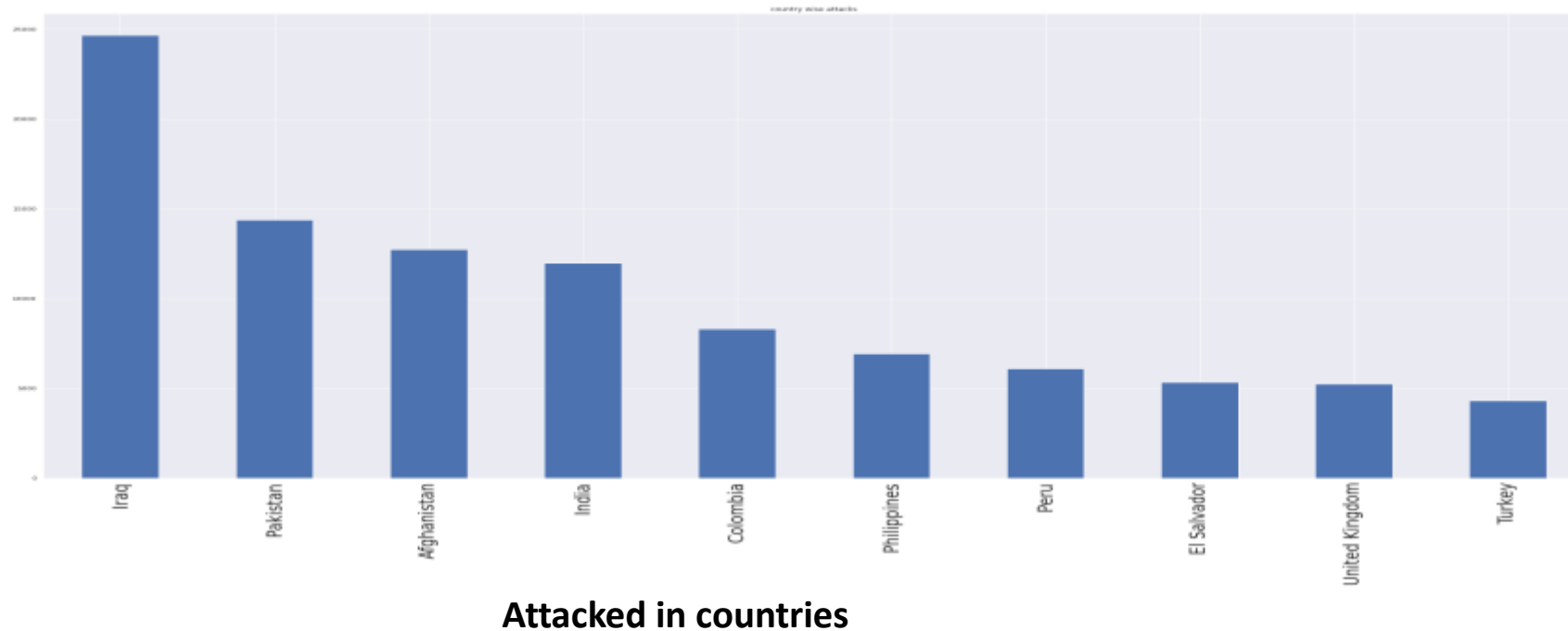
- **From the above graph we can visualise that Iraq is the top Most affected countries with 24636 number of attacks**
- **While Pakistan , Afghanistan and India ranked in most affected country list after Iraq.**

Numbers of attacks happened in India

Number of Attacks Each Year in India
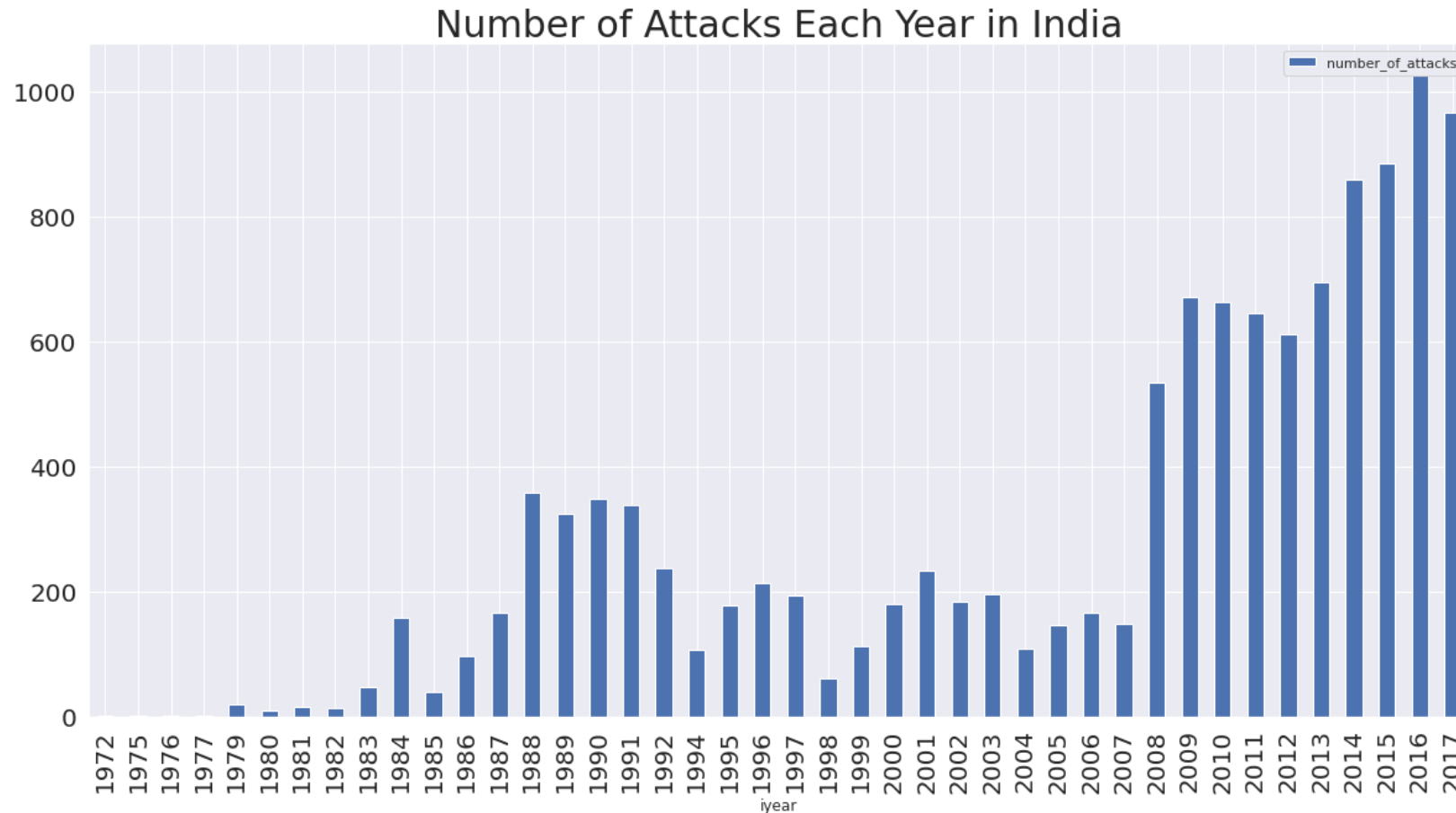
- From the graph bar we can visualise the attacks in India.
- We can visualise that 1970-1980 decade has least number of attacks while 2010-2017 decade has highest number of attack.
- Year 2016 has highest number of attacks maximum than 1k.

City wise attack:
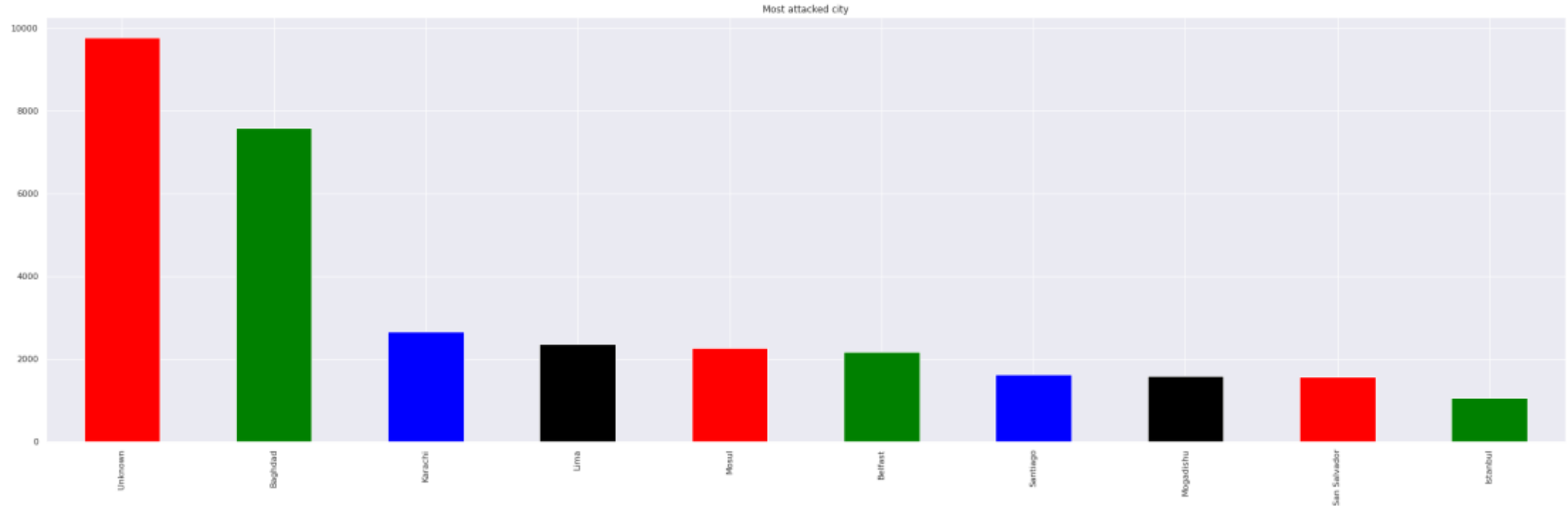
- **From the above graph we visualise that most attacked has been done through _out.**
- **In the list of Most Attacked cities city Baghdad ranked top among all different cities.**
- **Karachi, Lima ranked in 2nd and 3rd position respectively**.

Gangs involved in different attacks:

- **Most Dangerous gangs operating is Taliban which accounts for 6% of world's Terrorist attack**
- **Followed by Islamic state of Iraq and the Levant (ISIL) which accounts for 5%.**
- **The 71% of terror attack caused by different terrorist organisation throughout the world.**
- **Different terrorist organisation caused terror attack not only in their areas but also in different regions to give their message and meet their demands.**
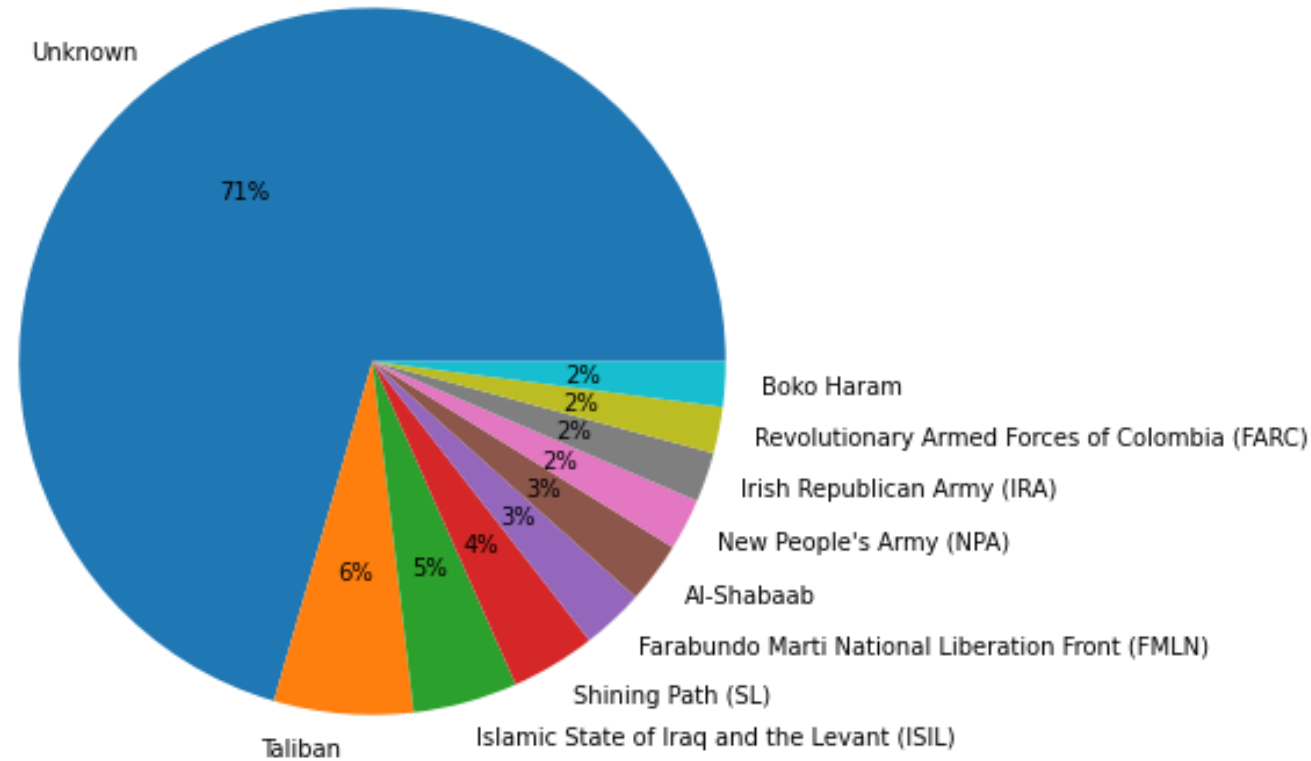
success ratio of
extended,success,suicide,claimed,property,vicinity
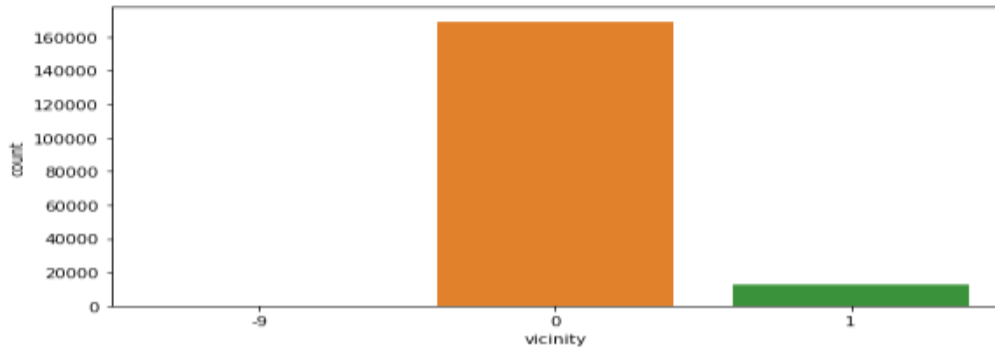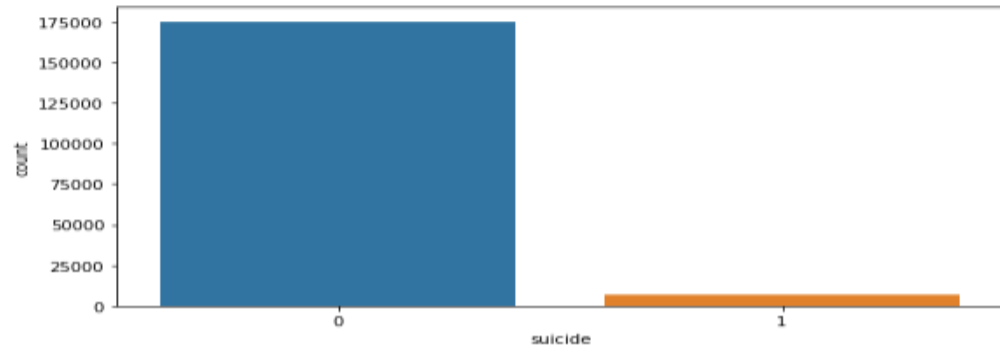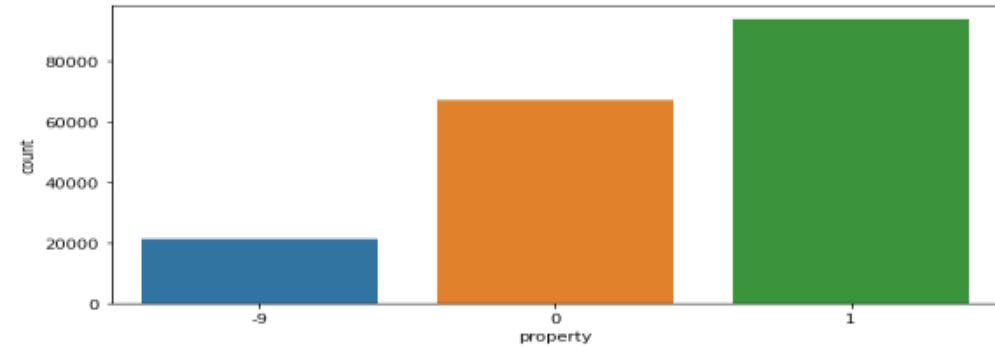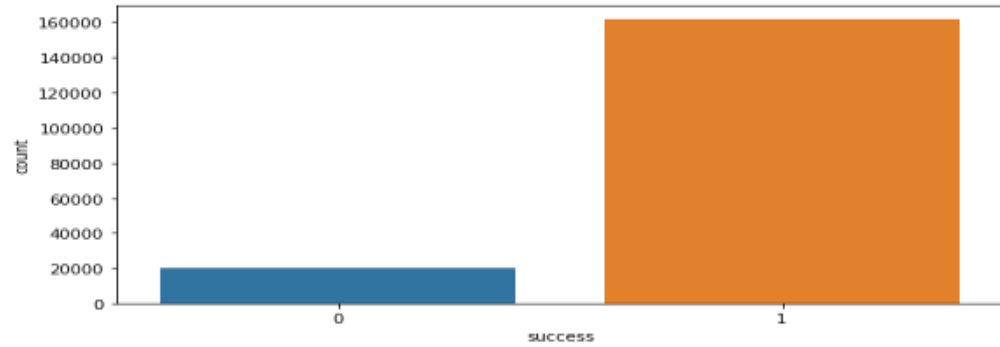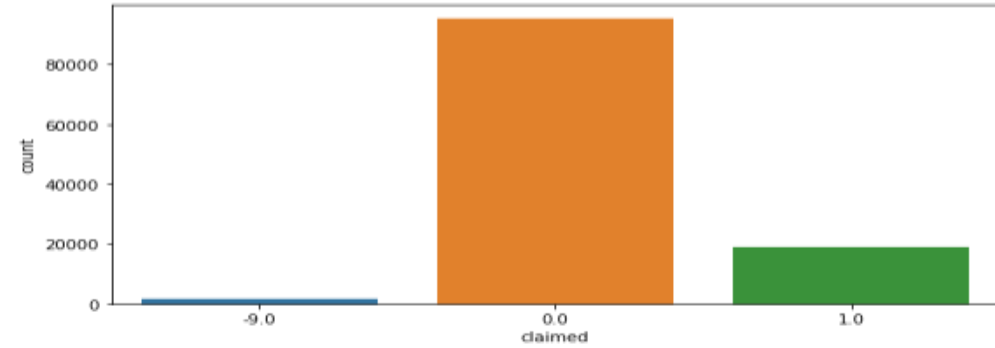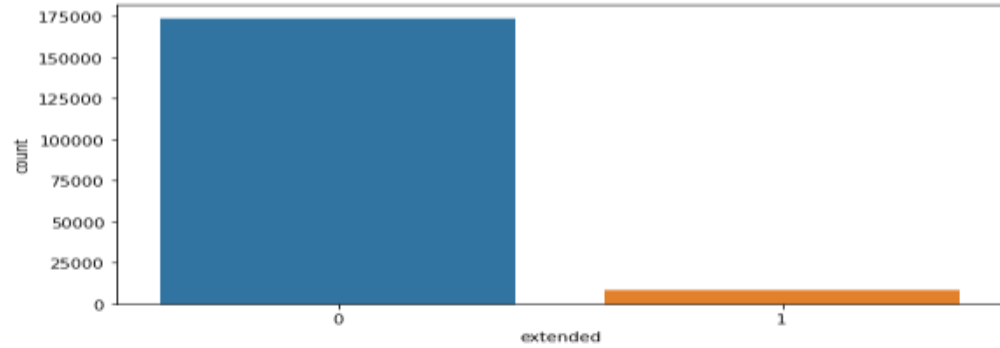
Top Most Terrorists gangs operating in countries

countries with most attacks by a group

gname.country_txt
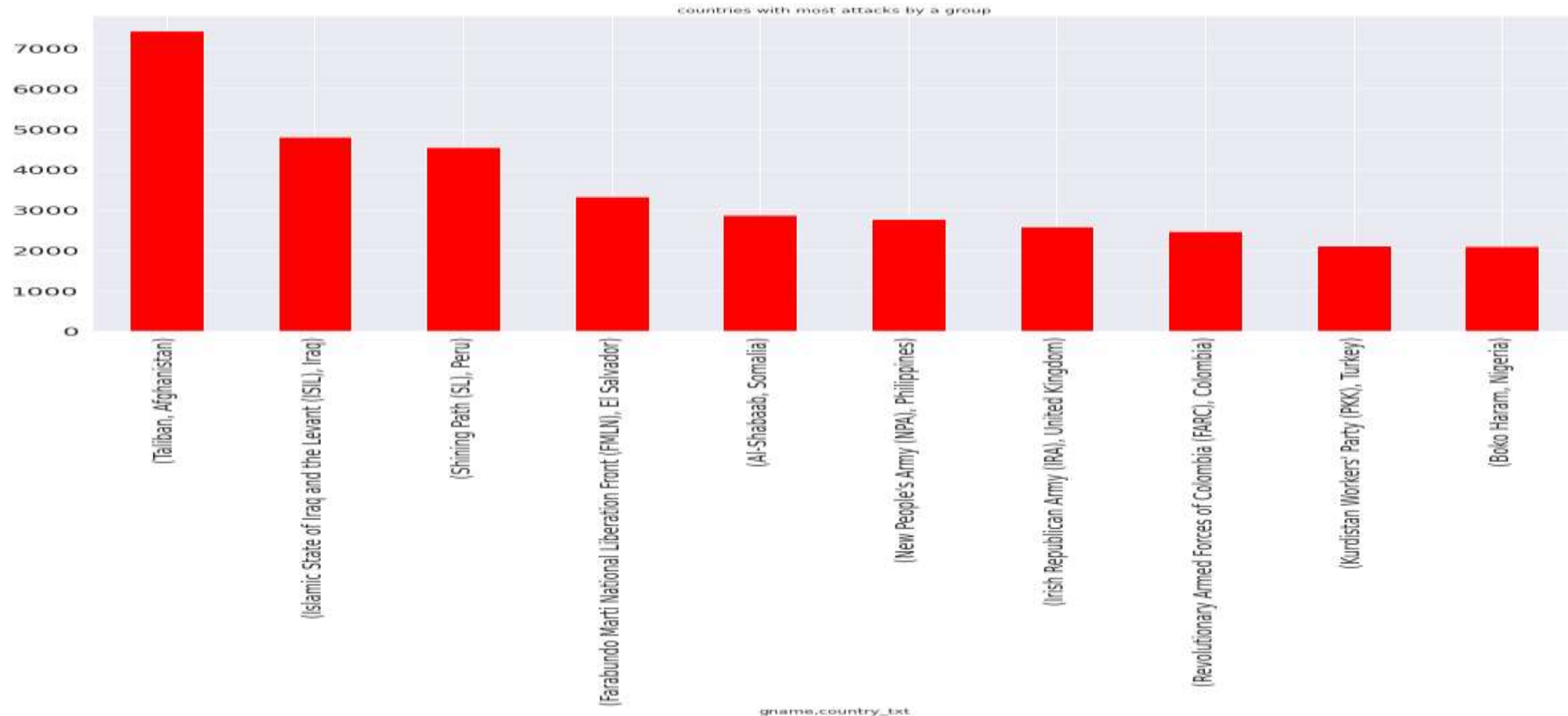
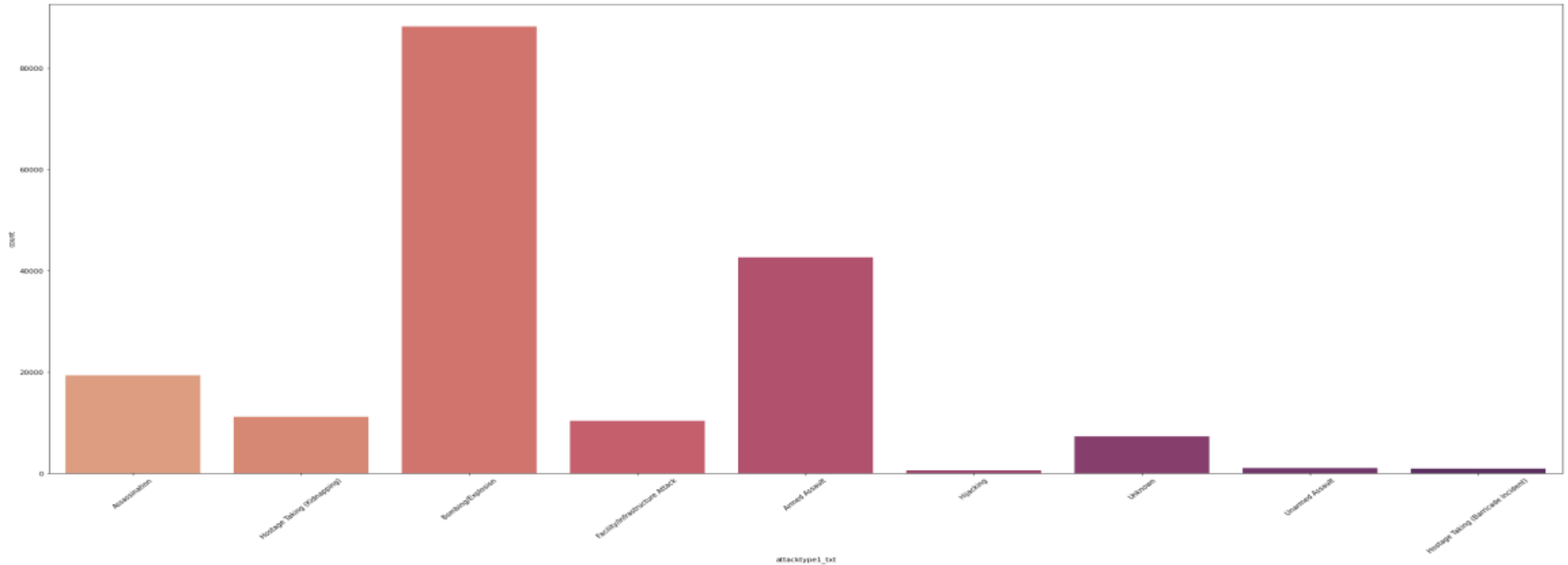- ▪ **The above bar graph shows Gang Taliban has highest number of activity in Afghanistan , while ISIL is mostly active in Iraq , country Peru is attacked mostly by Gang Shining Path.**

Gangs operating in different regions

Gangs Involved region wise
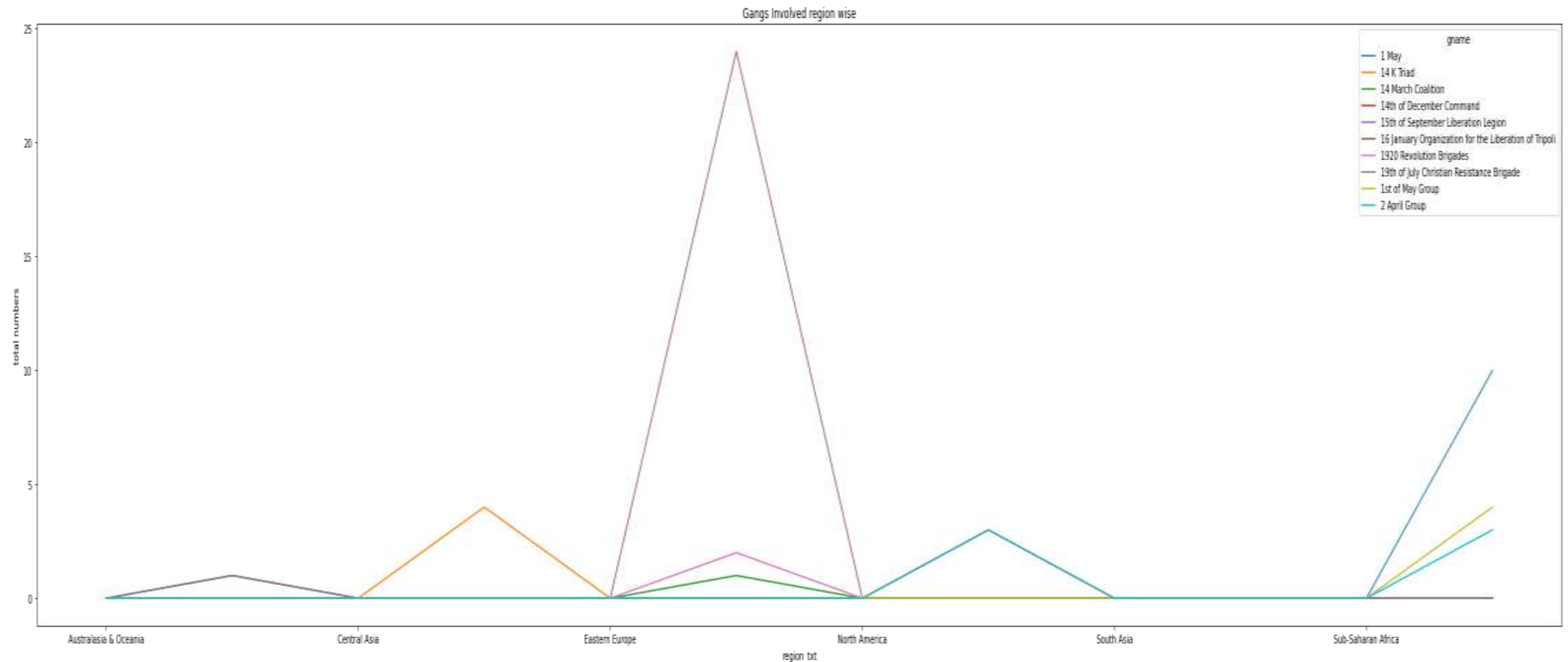
- As per the graph we can see that the region like Eastern Europe and North America has most number of gangs operating in compared to Australia & Oceania.

Mode of attack:

- **As per the graph we an see that terrorist used bombing/explosion as their prefer mode of attack followed by armed assault .**

Weapons used:
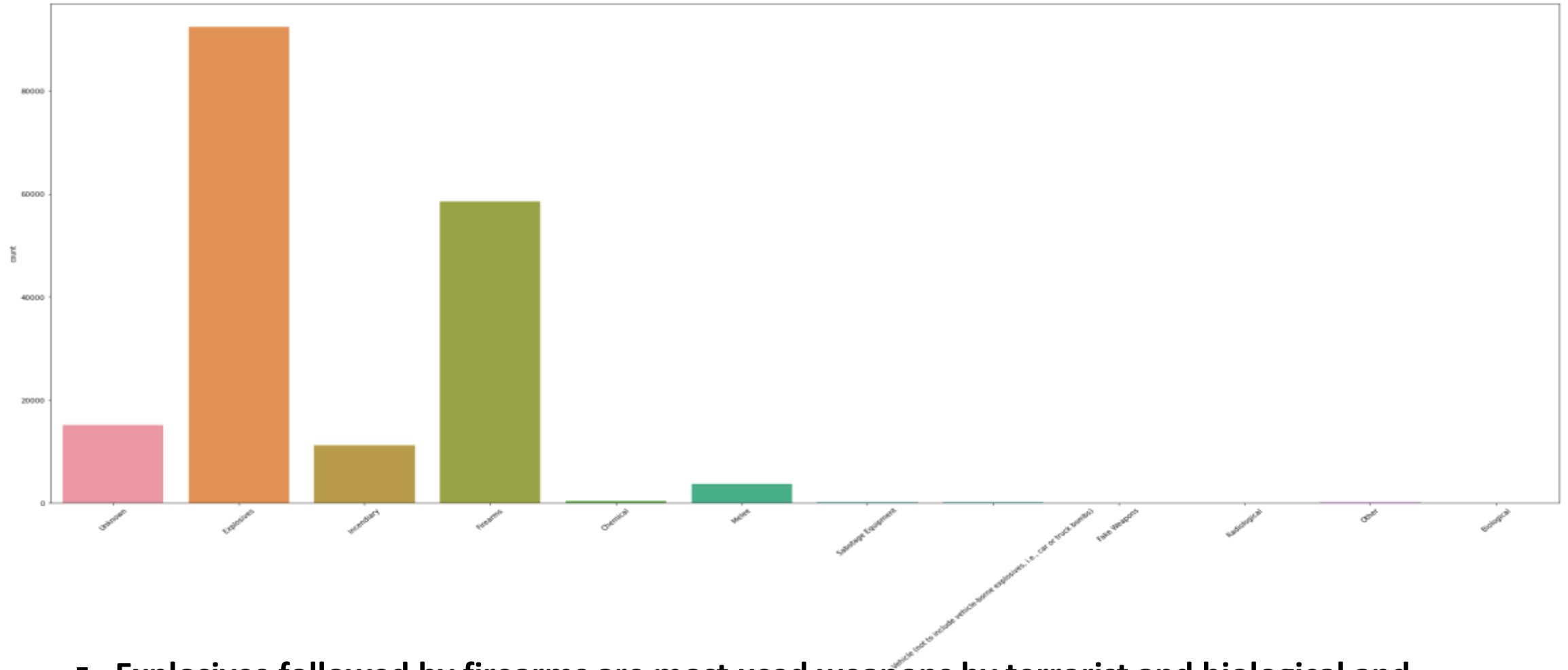
- **Explosives followed by firearms are most used weapons by terrorist and biological and radiological weapons are used least.**

Weapon subtype used by terrorist
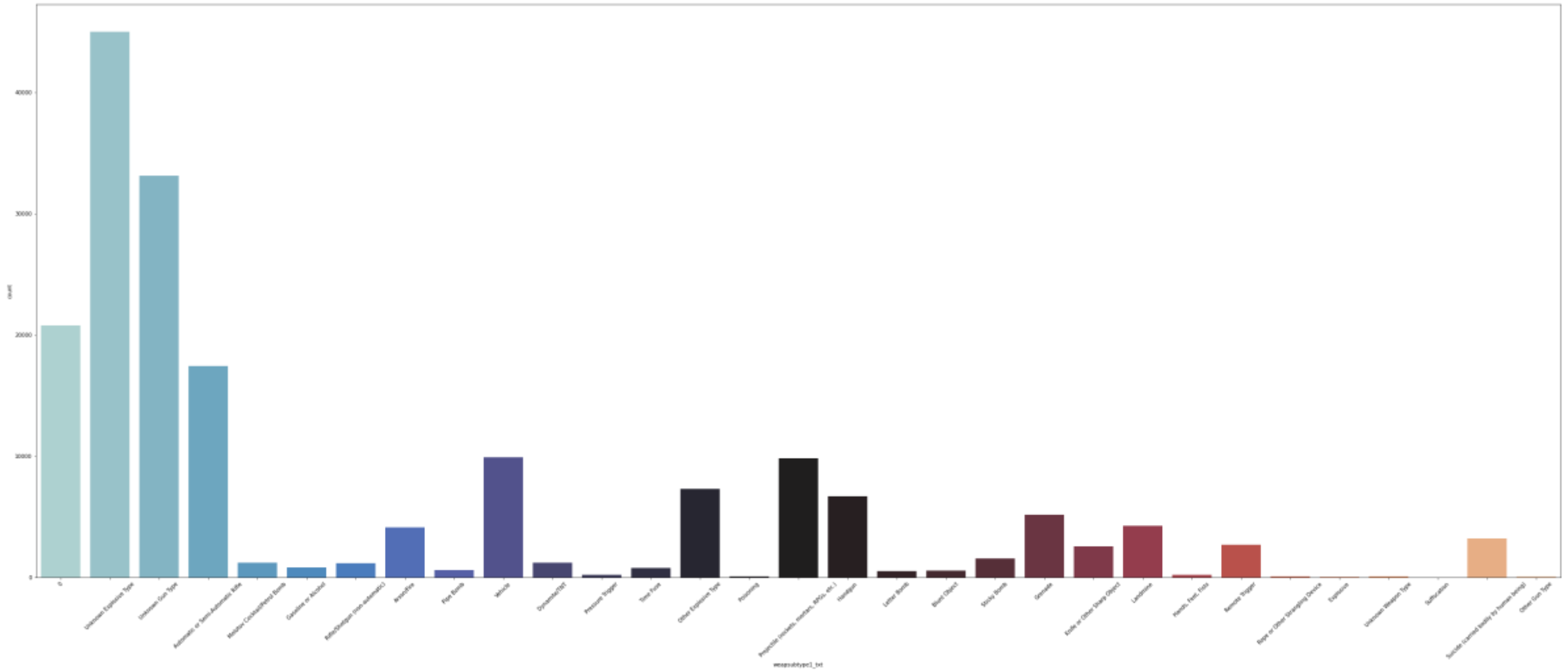
- **Explosive and Different Gun types are used most by the terrorist**.

Targeted sectors
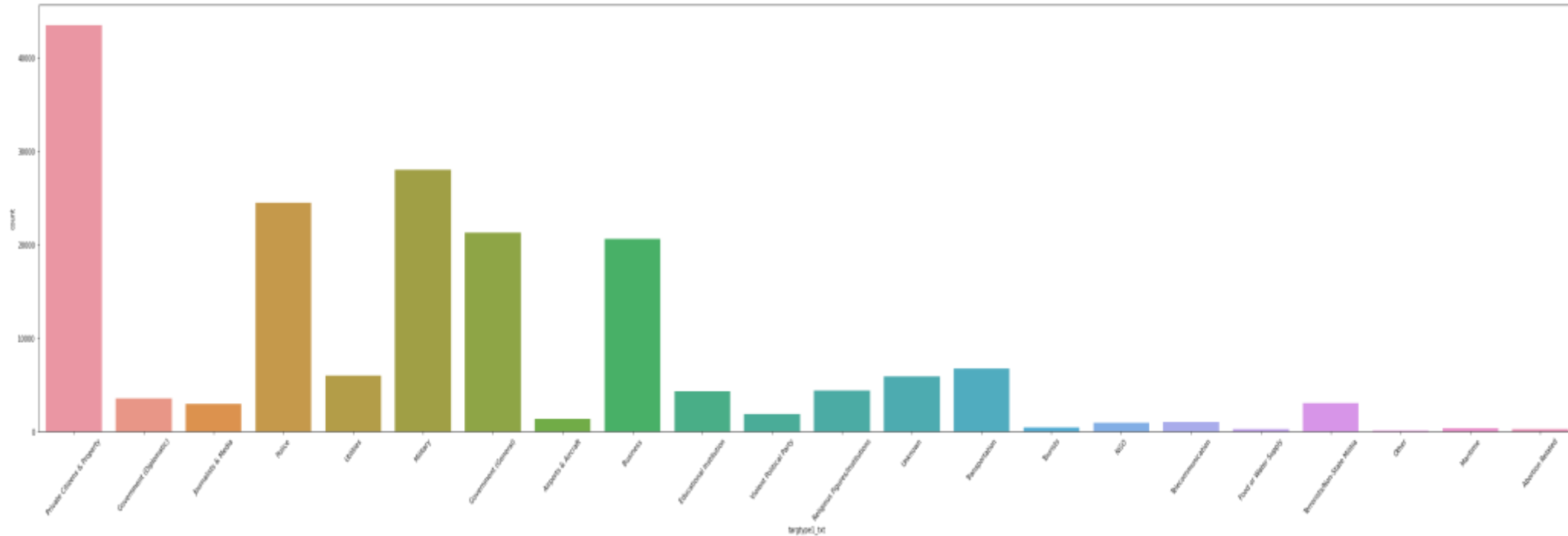
- **Terrorist attacked most at private sector property, military, Police and government Personnel as per the graph.**

Targeted Subsectors

Types of target
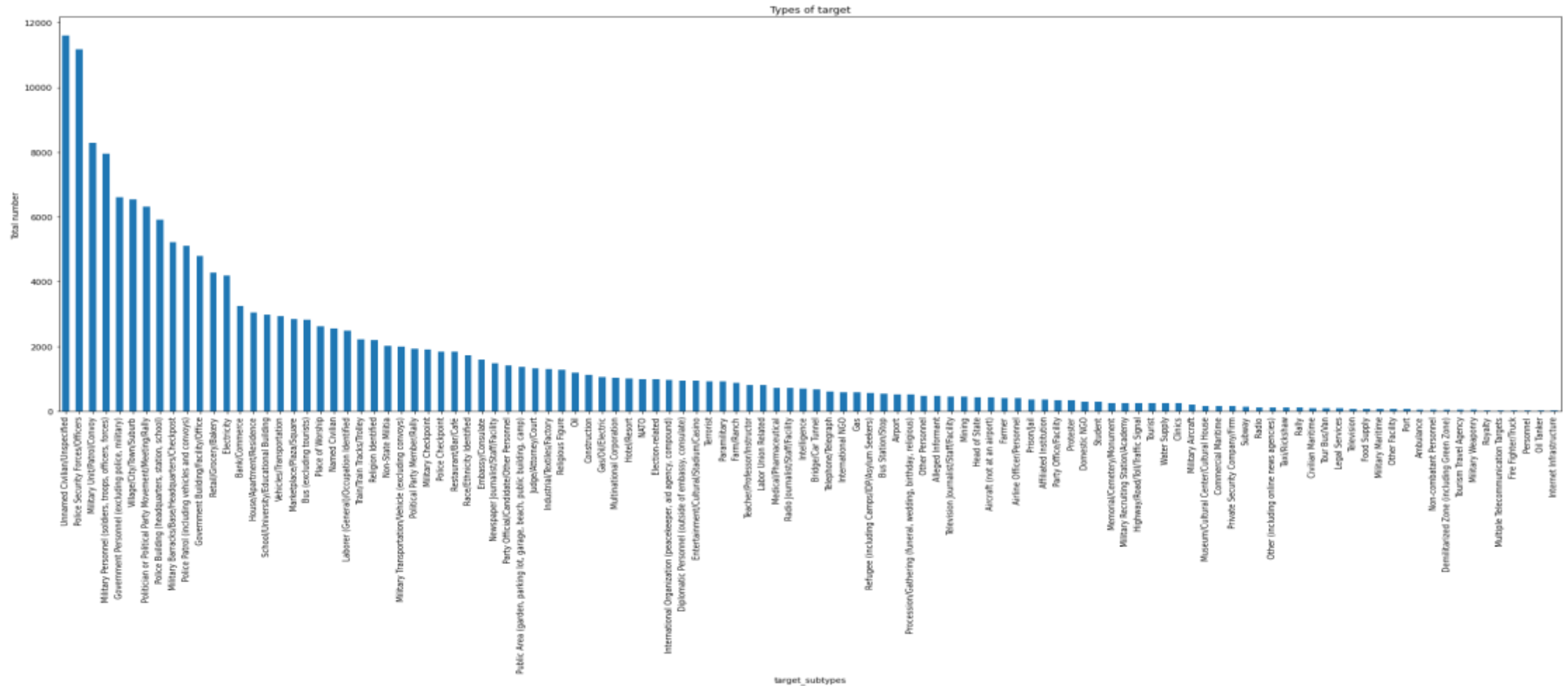
- Terrorist attacked Unnamed Civilian, Police Security Forces/Officers ,Military Unit/Patrol/Convoy ,Military Personnel (soldiers, troops, officers, forces),Multiple Telecommunication Targets.

The Casualty Number

Number of people killed , wound, kidhost :

region wise number of people killed
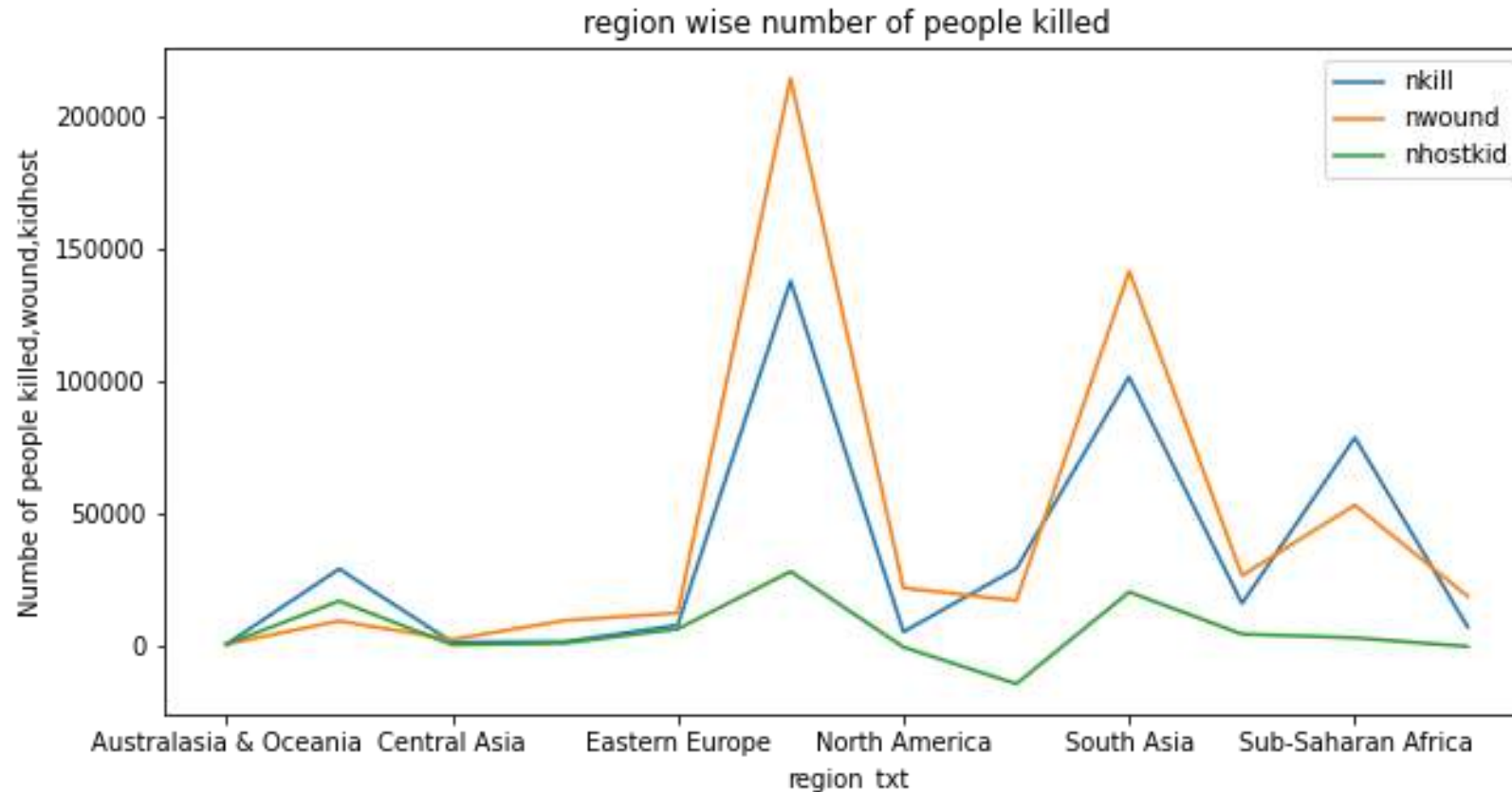
- As per the graph the casualty is higher in Eastern-Europe and North America where as Australia & Oceania has least casualities.

Total Casualties
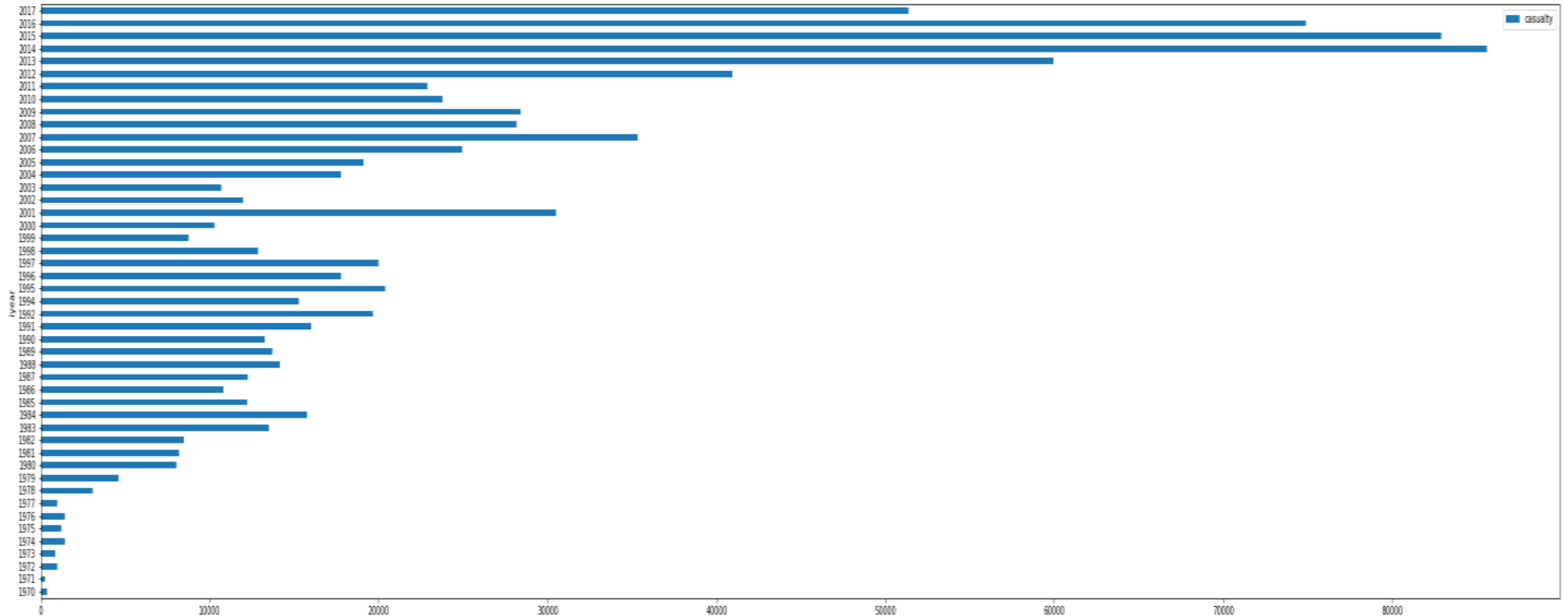
- **In the year 2014 total casuality are highest where as 1971 has least numbers. From year 2012 the casuality number have risen exponentially.**

Total number of Kills:
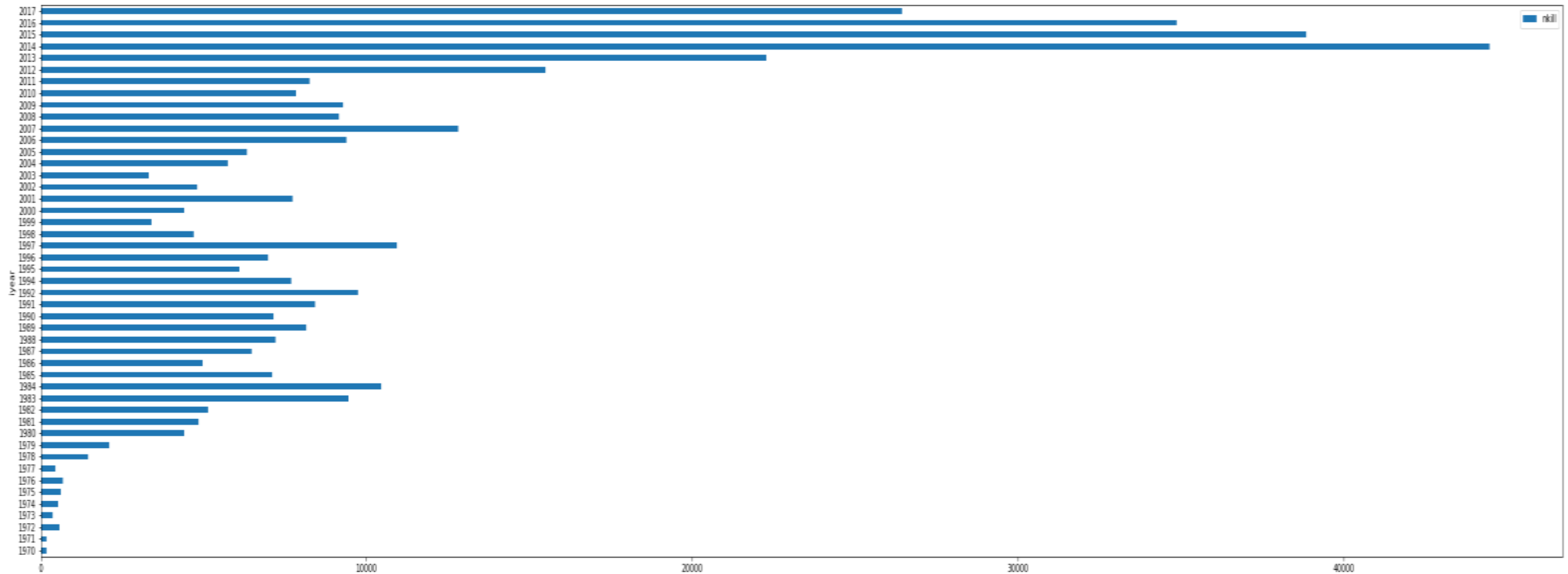
- **Most kills happened in the year 2014 followed by 2014 but from 2014 the number of kills have declined.**

Total number of wounds:

- **As per the graph most people attacked are wounded in the year 2015 followed by 2014.**

Comprehensive Analysis

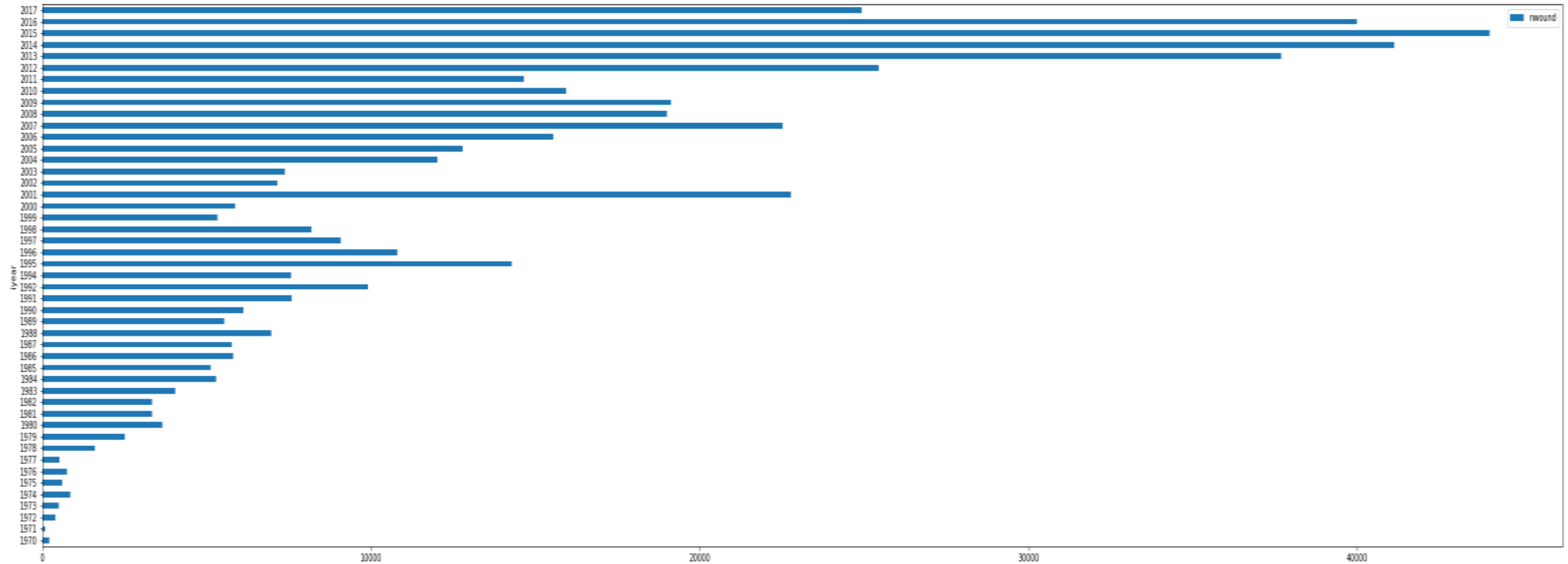|	iyear	success	claimed	suicide	extended	nkill	nwound	property	nhostkid	vicinity
count	181691.000000	181691.000000	181691.000000	181691.000000	181691.000000	181691.000000	181691.000000	181691.000000	181691.000000	181691.000000
mean	2002.638997	0.889598	0.031592	0.036507	0.045346	2.266860	2.883296	-0.544556	0.338624	0.068297
std	13.259430	0.313391	0.872204	0.187549	0.208063	11.227057	34.309747	3.122889	55.306010	0.284553
min	1970.000000	0.000000	-9.000000	0.000000	0.000000	0.000000	0.000000	-9.000000	-99.000000	-9.000000
25%	1991.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50%	2009.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000
75%	2014.000000	1.000000	0.000000	0.000000	0.000000	2.000000	2.000000	1.000000	0.000000	0.000000
max	2017.000000	1.000000	1.000000	1.000000	1.000000	1570.000000	8191.000000	1.000000	17000.000000	1.000000

Challenges Faced

- **It was necessary to manage a sizable amount of data while being careful not to overlook anything, no matter how irrelevant.**
- **Recognize the importance of each column and Choose the proper graph to show the varying patterns throughout.**
- **A few code and mapping issues.**
- **High calculation time**

Conclusion:

➢ **Upon completion of EDA using various types of graphs the highest number of attack is in the year 2014 and the lowest number of attack is in the year 1971.**

➢ **After year 2014 the attack rate is gradually decreased. And in the month of May has occurred more number of attacks.**

➢ **The region Middle east and north Africa has most number of attacks followed by South Asia.**

➢ **Iraq tops the list of countries with the most attacks, followed by Pakistan, Afghanistan, and India.**

➢ **Year 2016 has the highest number of attack in India with total number of 1025 attacks in a year.**

➢ **The majority of attacks used explosives to initiate and weapons to finish.**

➢ **The majority of attacks going towards private citizen & property, while Unnamed civilians top the subsector lists.**

➢ **Taliban has been the most active terrorist gang in the world.**

➢ **Total humans affected due to terrorist attack is highest in the year 2014, while same year has highest number of kills and year 2015 has highest number of wounds.**

Thank You