Homework 4

Tableau Tasks

1. Global Terrorism Heatmap

Eastern Europe Heatmap showcasing the number of attacks in each country.

Converted Year (Number) -> Date. Gradient for colors based on the count of events (attacks). Set alias for West Germany as Germany

- Most attacks seem to have been concentrated in UK, Spain, France, Italy and Germany
- UK has had 200+ attacks 4 times.
- There were a lot of attacks across Europe during 1979.
- Recently the attacks seem to have been reduced.

2. Terrorist Group Comparison

Stacked area chart showing the activity of the top 10 terrorist groups by year. Setting a filter on Group Name to select the top 5 based on the *EventID* count.

- Most Terrorist attacks have been from Unknown groups.
- IRA has been responsible for a lot of attacks.
- ETA has also been responsible for significant attacks.
- Neo-nazi extremist had a lot of attacks in 1992.
- PKK conducted lot of attacks in 1995
- Most attack groups have been unknown since 1996.

3. Attack Types and Casualties

Scatter plot showing a comparison in attack types based on the casualties and no. of attacks.

- Bombings and explosions had the biggest impact with most attacks and wounded.
- Assassinations turned out with most kills.

4. Monthly Trend Analysis

- Bombing is the most common attack type across all the top 5 countries and months.
- Most Assasination events in Spain.
- Most Attacks in UK.
- Rise in attacks around new year and middle of the year around May.

PowerBI

1. Geospatial Analysis of Attacks

Bubble size based on casualties (wounded + killed). Red accents on white map for clarity and association with *harm*. Slicer and drop down for year and region. Transparent background so that they don't block the visualization.

- Most attacks seem to have been concentrated in UK, Spain, France, Italy and Germany
- Most attacks have been seen centered around big cities.

2. Terrorist Group Comparison

Multi-row card visual showing key metrics for the top 5 terrorist groups. Rounded corners and shadows for better visibility. Slider to easily filter data based on years.

- IRA has the most attacks and kills and wounds.
- FLNC has the highest success rate.

3. Weapon Type Analysis

Treemap of different weapon types with drill down functionality including the subtypes.

- Explosives have been the most commonly used weapon type by far.
- Followed by handguns.

4. Target Analysis Dashboard

Comparing wounds and kills in clustered chart. Since the graph is interactive kept the low values in the donut chart. Legend only displays the top Targets.

- Businesses specifically Banks have been a target for most attacks.
- Most casualties are of civilians on a Train in Spain.
- Most deaths Boeing 747 aircraft attack.

