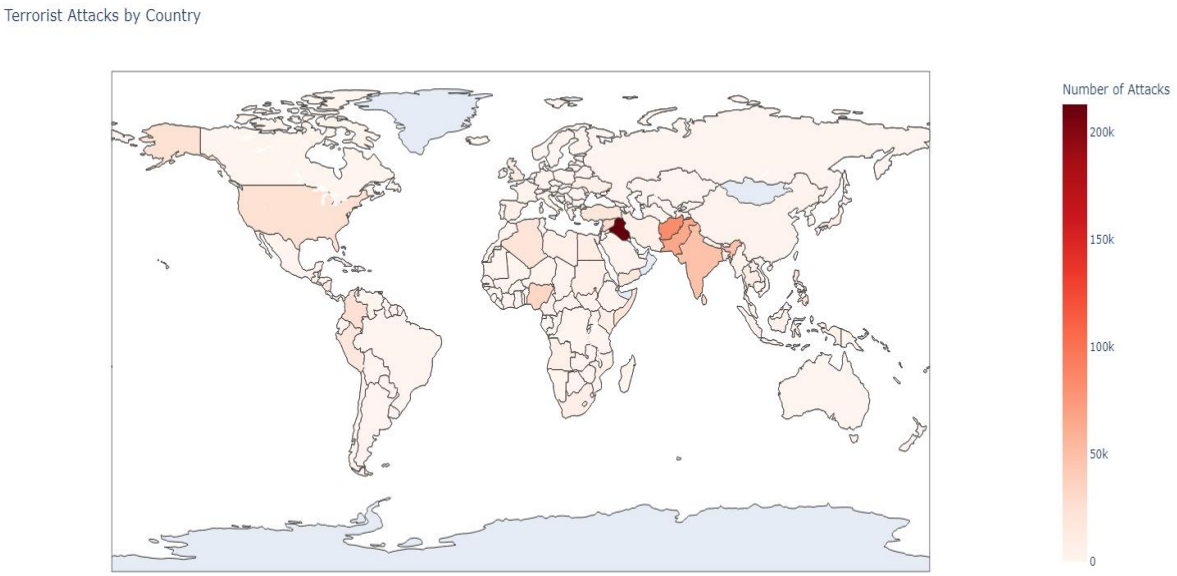
Goals:

- The goal is to visualize the distribution of terrorist attacks (from 1970 to 2017) across the world.
- To provide interactive hover information that displays the exact attack count for each country.



Insight:

- The choropleth map effectively highlights the global distribution of terrorist attacks. Hovering over a country we can see the precise attack count.
- Upon observing we can see that the countries with the highest number of terrorist attacks are concentrated in the Middle East, South Asia, and North Africa.
- Some of the countries with the highest numbers of attacks include Iraq: with 213,279 attacks, Afghanistan: with 83,661 attacks, Pakistan: with 65,860 attacks, and India: with 48,321 attacks.

Data abstraction:

- **Dataset Type:** Tabular data (CSV file)
    - **Item:** Terrorist incident
    - **Attributes:**
        - Country: Categorical type. The nation where the attack occurred.
          (Additional attributes used in code: Region, City, latitude, longitude)
        - Attack Count: Quantitative type. Represents the impact or casualties caused by the attacks.
          (Additional attributes used in code: Killed, Wounded, AttackType, Target, Group, extended, Target_Type, Weapon_Type, Motive)
        - Year: Quantitative type. Uses data from all the available years.
          (Additional attributes used in code: Month, Day)

Task abstraction:

The Choropleth map helps the users to manually explore the distribution of terrorist attacks over the globe. By looking at the colour intensity, users can locate and compare the precise attack count for a specific country. This helps in discovering patterns and trends about terrorism.

- **Marks:** Areas – Represent countries.
- **Channels:**
  - Colour – Represents attack count
  - Spatial position – Represents the position of each country on the map
- **Users:** Analysts, researchers, General public.
- **Actions:**
  - High-Level – Discover
  - Mid-Level – Explore, Locate
  - Low-Level – Identify, Compare
- **Targets:** Spatial Data – To view (by hovering) the attack count on a country.

Additional data source:

- The Choropleth map was created in python3 using the Plotly express package.
- The dataset used is called “Global Terrorism Database”, available as a CSV file at kaggle.com
  Link: https://www.kaggle.com/datasets/START-UMD/gtd/data