HomeWork 2

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• Geographical distribution of incidents

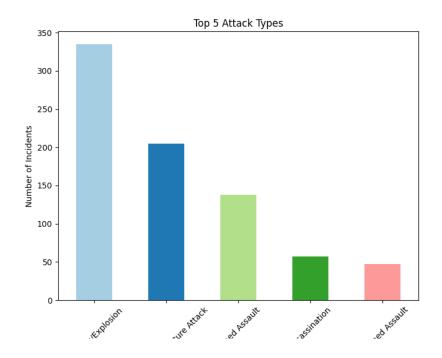
- The choropleth map highlights the varying distribution of incidents across different countries.
 - Countries with darker shade indicates regions with higher terror incidents occurred.
 - Through the map we can identify countries with high terror activities in that region (Ex: China and Japan have been subjected to terror attacks more in the SEA (southeast Asia) region than any other countries.)
- o For detailed distribution of incidents, we can get insights from the heatmap where we can notice which parts of the country have been more targeted to terror attacks.





Most Common Attack Types

- o A frequency analysis reveals that the most prevalent attack types are:
 - Bombing/Explosion
 - Facility/Infrastructure Attack
 - Armed Assault



• Trends and patterns observed in the time series analysis

o From the line plot and decomposition analysis.

Overall Trend:

- The trend line shows a steady rise from the late **1970s**, peaking around **1990–1995**, followed by a gradual decline.
- This suggests that the number of incidents increased significantly during this period and then declined in the early 2000s, potentially due to improved security measures or policy changes.

Seasonality:

- The seasonal component exhibits regular oscillations, implying a cyclical pattern of incidents recurring annually.
- The seasonality is relatively consistent, indicating that there may be certain times of the year when incidents are more likely though the magnitude is not very high.

Residual:

 There's a relatively random distribution around zero, but some noticeable spikes and drops suggest the presence of external shocks or anomalies.

