Assignment

Given a dataset which contains point data and its information.

Tasks:

- Perform data preprocessing and exploratory data analysis (EDA) on the data and share the insight
- Conduct spatial clustering to identify High Risk Zones and label them based on their severity.
- Classify the data based on the Year and conclude which year is most affected.
- Prepare a script to calculate the count of total events occurring within 50 KM of a point.

Deliverables:

- Jupyter Notebook or Python script containing your code, documentation, and visualizations.
- Executive summary highlighting the key findings, insights, and recommendations.

Key Information about the Attached Dataset

The given dataset is the weather incident data, and provides a detailed account of various meteorological events within specific regions.The dataset covers a defined period and specific geographic areas, includes essential details such as the date and time of the incident, precise location, the type of event and other details.

The dataset contains the following attributes:

- **date**: The date/time of the event reported.
- **latitude**: The geographical latitude location.
- **longitude**: The geographical longitude location.
- **event-type**: The type of event reported in the geographical location.
- **city**: The city of the geographical location.
- **county**: The county of the geographical location.
- **state**: The state of the geographical location.

Link for Dataset: Dataset