Coding Challenge Insurance and Claim Incident Analysis

Your task is to analyze the provided insurance claim dataset and deliver actionable insights using Power BI visualizations.

Dataset

- Sample data fields include:

    - Policy number, state, annual premium, deductible, umbrella limit

    - Insured's age, zip, occupation, education, and hobbies

    - Incident date, type, severity, location, hour, property damage, injuries

    - Total claim amount, breakdown by injury/property/vehicle claims

    - Vehicle details, fraud reported status.

Problem Statement

Analyze and visualize the insurance claims data to answer critical business questions:

- What are the trends in claims (by policy type, region, incident type, etc.)?

- Which customer segments or locations have the highest claim rates?

- What is the distribution of fraudulent vs. non-fraudulent claims, and what factors are common in fraud cases?

- What is the relationship between policy details (premium, deductible) and claim amounts/frequency?

Required Deliverables

- Import and model the dataset in Power BI.

- Build visualizations—cards, bar/line charts, maps, tables—to explore key KPIs:

    - Claim count and total claim value by state, incident type, and time

    - Customer segmentation by demographic and policy features

    - Loss ratio and fraud rate by relevant attributes

- Include interactive elements (slicers for period, region, policy type, etc.).

- Prepare a short summary of findings and recommendations for the insurance company's management.