# **Problem Statement**

### **Mentorness Internship Program**



## **Project Name: Predicting Global Temperature**

Develop a machine learning model to predict global temperatures based on historical temperature data from various geographical levels, including global, state, major city, and country-specific records.

#### **Dataset Description:**

#### 1. Global Temperature

- o **dt**: Date of the recorded temperature.
- LandAverageTemperature: Average land temperature.
- LandAverageTemperatureUncertainty: Uncertainty in the average land temperature.
- o **LandMaxTemperature**: Maximum land temperature.
- LandMaxTemperatureUncertainty: Uncertainty in the maximum land temperature.
- o LandMinTemperature: Minimum land temperature.
- o **LandMinTemperatureUncertainty**: Uncertainty in the minimum land temperature.
- o **LandAndOceanAverageTemperature**: Average land and ocean temperature.
- LandAndOceanAverageTemperatureUncertainty: Uncertainty in the average land and ocean temperature.

#### 2. Global Temperature by State

- o **dt**: Date of the recorded temperature.
- o **AverageTemperature**: Average temperature for the state.
- AverageTemperatureUncertainty: Uncertainty in the average temperature for the state.
- o **State**: Name of the state.
- o **Country**: Name of the country.

#### 3. Global Temperature by Major City

- o **dt**: Date of the recorded temperature.
- AverageTemperature: Average temperature for the major city.
- AverageTemperatureUncertainty: Uncertainty in the average temperature for the major city.
- City: Name of the city.
- o **Country**: Name of the country.
- Latitude: Geographical latitude of the city.
- o **Longitude**: Geographical longitude of the city.

#### 4. Global Temperature by Country

o **dt**: Date of the recorded temperature.

- **AverageTemperature**: Average temperature for the country.
- **AverageTemperatureUncertainty**: Uncertainty in the average temperature for the country.
- o **Country**: Name of the country.

# **Deliverables:**

- Source code file from any IDE with all the steps.
- PowerPoint presentation
- Video explaining the tasks you have performed along with insights you have gained for Global Temperature Prediction.

Good luck, and enjoy your journey into the world of data analysis!