

MECE Breakdown For Weather Analysis Problem

Climate Pattern
Analysis :

Temperature Trends

Identify seasonal temperature changes, heatwaves, and cold spells.

Humidity Variations

Analyze how humidity fluctuates daily, seasonally, and across regions.

Pressure Changes

Study atmospheric pressure patterns and their relation to weather conditions.

Weather Condition
Analysis:

Weather Descriptions

Categorize different weather types (e.g., clear, rainy, stormy, foggy) and analyze their frequency.

Wind Speed Trends

Determine wind behavior, seasonal wind changes, and dominant wind directions.

Extreme Weather Events

Identify patterns in extreme conditions like storms, hurricanes, or prolonged heatwaves.

Correlation Analysis
Between Weather
Attributes:

Temperature vs. Humidity

Understand how humidity levels impact temperature variations.

Pressure vs. Weather Conditions

Identify the impact of pressure drops or rises on weather changes.

Wind Speed vs. Temperature

Analyze if wind speed influences cooling or warming trends.

Location-Based
Analysis:

City-wise Weather Patterns

Compare different cities' climate behaviors.

Geographical Impact on Climate

Assess how latitude, longitude, and altitude affect weather conditions.

Regional Weather Extremes

Identify areas prone to extreme weather changes.

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