WEEK 2 REPORT

Topic: Data Cleaning Using Python (Jupyter Notebook)

Objective

To perform data preprocessing and cleaning using Python in Jupyter Notebook to prepare the disaster dataset for analysis and visualization.

1. Introduction to Python for Data Analysis

• Understood the role of Python in data analysis and preprocessing.
• Learned how Python supports data handling, transformation, and automation.
• Explored libraries such as Pandas and NumPy for data cleaning.

2. Working Environment Setup

• Used Jupyter Notebook as the development environment.
• Imported required Python libraries for data manipulation.
• Loaded the disaster dataset into the notebook for processing.

3. Data Cleaning Process Using Python

• Handling missing values.
• Removing duplicate records.
• Data type conversion.
• Column renaming.
• Filtering and selecting required data.

Outcome

• Clean and structured dataset prepared using Python.
• Improved data accuracy, consistency, and reliability.
• Dataset ready for advanced analysis and visualization in Power BI.