

Data Collection and Preprocessing Phase

Date	25 july 2025
Team ID	Vinayak Garg
Project Title	Predicting Plant Growth Stages with Environmental and Management Data Using Power BI
Maximum Marks	10 Marks

Data Exploration and Preprocessing Template

Identifies data sources, assesses quality issues like missing values and duplicates, and implements resolution plans to ensure accurate and reliable analysis.

Section	Description
Data Overview	The dataset includes environmental and management data: soil type, sunlight hours, watering frequency, fertilizer type, temperature, and humidity.
Data Cleaning	Data was already clean; no missing values or duplicates were present.
Data Transformation	Converted temperature and humidity decimal values into whole numbers for uniformity and better readability. Used Power Query for basic formatting.
Data Type Conversion	Ensured temperature and humidity were stored as whole numbers (integer type).
Column Splitting and Merging	No splitting or merging of columns was necessary as the dataset structure was already appropriate.

Data Modeling	Established logical relationships between data tables and created calculated columns/measures to enhance analysis.
Save Processed Data	Saved the transformed and modeled data to be used in Power BI dashboards and visualizations