Data Collection and Preprocessing Phase

Date	17 December 2025
Team ID	xxxxxx
Project Title	Global Food Production Trends and Analysis: A Comprehensive Study from 1961 to 2023 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 contains global food production data from 1961 to 2023, including country-wise, year-wise, and commodity-wise production values used for trend and comparative analysis.
Data Cleaning	Missing values, duplicate records, and inconsistent entries were identified and handled using Power Query in Power BI to ensure data accuracy and consistency.
Data Transformation	Power Query was used to filter irrelevant data, sort records, rename columns, and create calculated columns required for analysis.
Data Type Conversion	Production values were originally in general or decimal format and were converted into whole numbers. Data types were corrected to ensure numerical consistency and accurate aggregation in Power BI.
Column Splitting and Merging	Columns were split or merged where necessary to separate or combine attributes such as year, Entity for better analysis.
Data Modeling	Relationships between tables were defined, and measures were created using DAX to support efficient querying and interactive dashboard visualization.

Save Processed Data	The cleaned and transformed dataset was saved and loaded into Power BI for visualization, dashboard creation, and future analysis.