

## Data Collection and Preprocessing Phase

Date	08 December 2025
Team ID	SWUID20250189320
Project Title	Power BI Inflation Analysis: Journeying Through Global Economic Terrain.
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.

Data Collection and Preprocessing	Description
Data Overview	<p>Dataset sourced from Kaggle, covering global inflation rates by country and year, includes inflation categories and adjusted values. (Format: CSV, Size:45KB) have originally contains <b>196 rows</b> and <b>47 columns</b>.</p> <p>.</p>
Data Cleaning	<p>Handle missing values by imputing regional averages or exclusion.</p> <p>Remove duplicates by country/year.</p> <p>Correct outliers using official references.</p>
Data Transformation	<p>Use Power Query Editor for filtering, sorting.</p> <p>Create calculated columns for inflation categories.</p> <p>Pivot data for comparative views.</p>
Data Type Conversion	Ensure correct data types: country as text, year as integer, inflation as decimal.

Data Collection and Preprocessing	Description
	Fix any incorrect typing for calculation/filtering.
Column Splitting and Merging	Split combined location info into country and region columns. Merge actual and adjusted inflation into one consolidated table.
Data Modelling	Establish relationships between inflation and regional tables. Create DAX measures for KPIs: average inflation, category, year-on-year changes.
Save Processed Data	Save Power BI file (.pbix) with cleaned and modelled data. Export backup clean CSV for reuse and sharing.