

Data Collection and Preprocessing Phase

Date	23 July 2025
Team ID	
Project Title	Power BI inflation analysis: journeying through global economic
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	Understanding global economic dynamics, specifically the trends in inflation rates, is paramount for policymakers, economists, and researchers. This dataset, covering the years 1980 to 2024, offers a comprehensive perspective on inflation across various countries. The primary focus is on dissecting the data based on country-specific indicators, providing valuable insights into the multifaceted factors influencing economic environments on a global scale.
Data Cleaning	Missing values were handled using forward-fill and median imputation techniques. Duplicate rows were removed using Power Query's "Remove Duplicates" function. Inconsistent entries (e.g., wrong country names) were corrected manually.
Data Transformation	Power Query was used to filter data by years (2000–2024), sort countries alphabetically, pivot year columns for time series format, and create calculated inflation rate change columns using DAX and M language.
Data Type Conversion	All columns were verified and corrected for appropriate data types: numeric (for inflation rates), date (for years), and categorical (for countries). Text to date and text to number conversions were implemented as needed.

Column Splitting and Merging	Country and Region columns were split for better geographic analysis. Year and Month columns were merged into a unified Date column to aid in time-series modeling.
Data Modeling	Fact and dimension tables were created (Global_Inflation_Data.csv, Country of the world.csv). Relationships were established using primary keys.
Save Processed Data	The final cleaned and transformed dataset was saved as .pbix file and exported as .csv for backup. Also uploaded to GitHub for version tracking and team collaboration.