Data Collection and Preprocessing Phase

Date	25 June 2025
Project Title	Power BI Inflation Analysis: Journeying Through Global Economic Terrain
Maximum Marks	10 Marks

Section	Description
Data Overview	The dataset contains historical inflation data of multiple countries from 1980 to 2023. It includes columns such as Country, Year, Inflation Rate (%), Region, and Source. The data was collected from Kaggle and international sources like IMF and World Bank.
Data Cleaning	- Unpivoted year columns into a single 'Year' column. - Cleaned and standardized inconsistent inflation rate values. - Added a 'Region Code' column for easy filtering. - Inserted an index column for unique row identification. - Added 'Inflation Category' to group rates (Low, Moderate, and High). - Created 'Inflation Status' to show Positive, Negative, or Zero values.
Data Transformation	- Used Power Query to filter unnecessary columns. - Sorted data by Year and Country. - Created calculated columns like "Inflation Change" to compare yearly trends. - Grouped data by Region for comparative analysis.
Data Type Conversion	- Converted 'Year' to Whole Number. - Ensured 'Inflation Rate' is in proper decimal format. - Set text fields like Country and Region to string type.
Column Splitting and Merging	- Split combined 'Country-Region' fields if necessary. - Merged 'Country' and 'Year' to form a new ID for better identification.
Data Modeling	

	Created multiple DAX measures to enhance analysis: • Top Region • Total Countries • Year Count • Previous Inflation • Current Inflation • Numeric Inflation • Min Inflation • Max Inflation • Latest Year • Highest Inflation • Lowest Inflation • Average Inflation Rate • Current Year Inflation • Inflation Category • Inflation Change (%) • Highest Inflation Region Summary • Lowest Inflation Region Summary • Region Count
Save Processed Data	- Saved final dataset in .pbix format. - Backed up clean data in .csv format for future use. - All Power Query steps documented and saved.