**Data Collection and Preprocessing Phase**

| Date | 28 July 2025 |
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| Team ID |  |
| Project Title | Power BI Inflation Analysis: Journeying Through Global Economic Terrain |
| Maximum Marks | 10 Marks |

**Data Exploration and Preprocessing**

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

| **Section** | **Description** |
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| Data Overview | The dataset contains information collected for the project, including multiple columns with numeric, categorical, and date values, intended for analysis in Power BI. |
| Data Cleaning | Handled missing values, removed duplicate records and corrected formatting errors.   1. Removed **indicator\_name** as it had same repeated values. |
| Data Transformation | Used Power Query for filtering irrelevant records, sorting by key metrics, pivoting/unpivoting columns, and creating calculated columns for insights.   * **New Column created:**  1. **AdjustedInflationRate:** A calculated Column created by multiplying InflationRate by 0.01.      1. **InflationRateCategory:** A conditional Column was created to categorize the inflation rate for different countries.  * **Measures created:**  1. **Average Inflation Rate:** A new measure was created to measure the average of Inflation Rate.      1. **Region Count:** A new measure was created to measure the distinct count of Region. |
| :Data Type Conversion | Converted columns to appropriate data types, such as Date, Integer, and Decimal, to ensure accuracy in aggregations and relationships.   1. Changed the data type of year from **Text** to **Decimal Number**. |
| Column Splitting and Merging | Split combined fields and merged columns where combined context was required.   1. Unpivoted **Year’s** column (1980 to 2024) into one column **Year.** |
| Data Modeling | Defined relationships between multiple tables, created hierarchies, and used DAX to generate calculated measures. |
| Save Processed Data | Saved the cleaned and transformed dataset as a Power BI model for reporting and future analysis. |