Project Development Phase
Model Performance Test

Date	13 March 2025
Team ID	PNT2025TMID02756
Project Name	Power BI Inflation Analysis: Journeying Through Global Economic Terrain.
Maximum Marks	

Model Performance Testing:

S.No.	Parameter	Screenshot / Values
1.	Data Rendered	The dataset used for the Power BI model is sourced from Kaggle, containing global inflation data from multiple years and countries. The dataset includes inflation rates, country names, and years. The data was successfully imported into Power BI, ensuring proper structure and readability.
2.	Data Preprocessing	The data preprocessing steps involved the following: - Removed null values and missing data. - Transformed data types (e.g., ensuring 'Year' was in whole number format). - Unpivoted columns to normalize data structure. - Applied filtering to exclude countries with incomplete inflation records. - Created calculated columns for inflation rate comparisons.
3.	Utilization of Data Filters	The Power BI dashboard uses interactive filters and slicers to enhance user experience: - Country-wise filter to compare inflation rates across different nations. - Year-wise slicer to analyze inflation trends over time. - Top 3 highest inflation rate countries displayed dynamically. - Filters to toggle between total, average, and maximum inflation values.
4.	DAX Queries Used	The following DAX queries were implemented to enhance the Power BI dashboard functionality: * Total Inflation Rate Calculation:'Total Inflation = SUM(InflationRate)`   *Average Inflation Rate Calculation:'Avg Inflation = AVERAGE(InflationRate)`

		*Maximum Inflation Rate Calculation: `Max Inflation = MAX(InflationRate)` *Rank Top 3 Countries by Inflation: `Top3Inflation = RANKX(ALL(Countries), [Total Inflation], , DESC, DENSE)`
5.	Dashboard design	The Power BI dashboard consists of multiple visualizations designed to provide clear insights: - Line Chart displaying inflation trends over time. - Map visualization showing country-wise inflation data. - Bar Chart ranking top 3 inflation rate countries. - Table summarizing inflation trends per year and country.
6	Report Design	The Power BI report includes multiple pages with interactive insights: *Page 1 (Summary Dashboard): Displays average, maximum, and total inflation rate. *Page 2 (Country Analysis): Focuses on inflation trends for specific countries. *Page 3 (Global Trends): Includes interactive charts and comparative analysis. *Page 4 (Exportable Reports): Allows users to generate PDF/PPT summaries.