

The background is a collage of financial and mathematical items. It includes several coins (some showing '10c'), a stack of coins, a calculator with visible buttons like '+', '-', '=', and '9', a ruler with millimeter markings, and a sheet of paper with dates (e.g., 2011.12.31, 2012.03.31, 2012.06.30) and numbers. A semi-transparent yellow circle is positioned behind the text.

# **EXAMINING INTERNATIONAL DEBT STATISTICS**

Countries often incur debt not just for basic necessities but also to stimulate economic growth. For instance, infrastructure investments are essential for ensuring a comfortable life for their citizens. The World Bank is the institution that extends loans to countries.

In this project, we will analyze international debt data gathered by The World Bank. We will utilize the data manipulation skills to identify which countries have the highest and lowest levels of debt.

# OVERVIEW

# PROBLEM STATEMENT

This project aims to analyze international debt data from the World Bank to identify:

- The number of countries included in the database.
- The country with the highest total debt.
- The country with the lowest principal repayment amount.

# GOALS

**01**

## **Count Distinct Countries**

Determine the total number of unique countries present in the dataset.

**02**

## **Find Highest Debt Country**

Identify the country with the highest debt value.

**03**

## **Find Lowest Principal Repayment**

Locate the country with the minimum principal repayment amount, focusing on the "DT.AMT.DLXF.CD" indicator.



# DATASET

The dataset is a CSV file named "**international\_debt.csv**" containing information about international debt, potentially provided by the World Bank. The data includes:

- **country\_name:** Name of the country (varchar).
- **country\_code:** Code representing the country (varchar).
- **indicator\_name:** Description of the debt indicator (varchar).
- **indicator\_code:** Code representing the debt indicator (varchar).
- **debt:** Value of the debt indicator for the given country (float).

# OUTPUTS

01

Determine the number of distinct countries in the database. The output should be a **`single`** row with a column aliased as **`total\_distinct\_countries`**. Save this query as **`num\_distinct\_countries`**.

02

Identify which country has the highest total debt. Your output should include **`two`** columns: **`country\_name`** and **`total\_debt`**, and it should return **`one`** row. Save this query as **`highest\_debt\_country`**.

03

Find the country with the lowest principal repayments, as indicated by the "DT.AMT.DLXF.CD" indicator code. The resulting table should contain **`three`** columns: **`country\_name`**, **`indicator\_name`**, and **`lowest\_repayment`**, and it should return **`one`** row. Save this query as **`lowest\_principal\_repayment`**.

# OUTPUTS

01

What is the number of distinct countries present in the database?

total_distinct_countries	
0	124

the result shows that there are 124 distinct countries in the dataset.

02

What country has the highest amount of debt?

country_name		total_debt
0	China	2.857935e+11

The result shows that China has the highest total debt among the countries in the dataset, with a debt amount of approximately 285.79 billion US dollars.

03

What country has the lowest amount of principal repayments (indicated by the "DT.AMT.DLXF.CD" indicator code)?

country_name		indicator_name	lowest_repayment
0	Timor-Leste	Principal repayments on external debt, long-te...	825000

The result indicates that Timor-Leste has the lowest principal repayment amount among the countries in the dataset, with a value of 825,000 USD. This specific repayment is for "Principal repayments on external debt, long-term."

# INSIGHTS

By analyzing the debt data, we can gain insights into the international debt landscape, including which countries have the highest debt burdens and how principal repayments are distributed. This information can be valuable for international organizations, policymakers, and researchers.