**1. The World Bank's international debt data**

It's not that we humans only take debts to manage our necessities. A country may also take debt to manage its economy. For example, infrastructure spending is one costly ingredient required for a country's citizens to lead comfortable lives. [The World Bank](https://www.worldbank.org/) is the organization that provides debt to countries.

In this notebook, we are going to analyze international debt data collected by The World Bank. The dataset contains information about the amount of debt (in USD) owed by developing countries across several categories. We are going to find the answers to questions like:

* What is the total amount of debt that is owed by the countries listed in the dataset?
* Which country owns the maximum amount of debt and what does that amount look like?
* What is the average amount of debt owed by countries across different debt indicators?



The first line of code connects us to the international\_debt database where the table international\_debt is residing. Let's first SELECT *all* of the columns from the international\_debt table. Also, we'll limit the output to the first ten rows to keep the output clean.

ANSWER :

In [37]:

%%sql

postgresql:///international\_debt

​

SELECT \*

FROM international\_debt

LIMIT 10;

10 rows affected.

Out[37]:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **country\_name** | **country\_code** | **indicator\_name** | **indicator\_code** | **debt** |
| Afghanistan | AFG | Disbursements on external debt, long-term (DIS, current US$) | DT.DIS.DLXF.CD | 72894453.700000003 |
| Afghanistan | AFG | Interest payments on external debt, long-term (INT, current US$) | DT.INT.DLXF.CD | 53239440.100000001 |
| Afghanistan | AFG | PPG, bilateral (AMT, current US$) | DT.AMT.BLAT.CD | 61739336.899999999 |
| Afghanistan | AFG | PPG, bilateral (DIS, current US$) | DT.DIS.BLAT.CD | 49114729.399999999 |
| Afghanistan | AFG | PPG, bilateral (INT, current US$) | DT.INT.BLAT.CD | 39903620.100000001 |
| Afghanistan | AFG | PPG, multilateral (AMT, current US$) | DT.AMT.MLAT.CD | 39107845 |
| Afghanistan | AFG | PPG, multilateral (DIS, current US$) | DT.DIS.MLAT.CD | 23779724.300000001 |
| Afghanistan | AFG | PPG, multilateral (INT, current US$) | DT.INT.MLAT.CD | 13335820 |
| Afghanistan | AFG | PPG, official creditors (AMT, current US$) | DT.AMT.OFFT.CD | 100847181.900000006 |
| Afghanistan | AFG | PPG, official creditors (DIS, current US$) | DT.DIS.OFFT.CD | 72894453.700000003 |

**2. Finding the number of distinct countries**

From the first ten rows, we can see the amount of debt owed by *Afghanistan* in the different debt indicators. But we do not know the number of different countries we have on the table. There are repetitions in the country names because a country is most likely to have debt in more than one debt indicator.

Without a count of unique countries, we will not be able to perform our statistical analyses holistically. In this section, we are going to extract the number of unique countries present in the table.

ANSWER:

In [39]:

**%%sql**

**SELECT**

**COUNT(DISTINCT country\_name) AS total\_distinct\_countries**

**FROM international\_debt;**

**\* postgresql:///international\_debt**

**1 rows affected.**

Out[39]:

|  |
| --- |
| **total\_distinct\_countries** |
| 124 |