# Exercise 1

1. Connect this .csv file to power BI Desktop:

<https://github.com/AtulKadlag/Marathi_DataAnalyst/blob/main/Sales_Tax_Collections_by_State_Dataset_exercise_1.csv>

1. In Power Query Editor, Perform following operations:
   1. Apply correct data types for all the columns.
   2. Remove the column “Note”
   3. In “value” column, replace null values with 0.
   4. From id column, extract the year value between “\_” character
   5. Sort the state column ascending.
2. Check any other cleaning things you can do with this data.
3. Now once this is done, try to plot the data in graphical representation, try to represent this data in different charts:
   1. Column chart
   2. Line Chart
   3. Tabular format
4. Publish this dashboard to Power BI Pro(If you have got the power BI pro trial version).

# Exercise 2

1. In your database(Microsoft SQL server/MySQL), create following two tables and insert some data in it. These are basically one dimensional table and other is transactional table, you can run these queries in the database, so that it create two new tables and insert some data as well:

-- Creating the dimensional table for Locations

CREATE TABLE Locations (

LocationID INT PRIMARY KEY,

City VARCHAR(50),

Country VARCHAR(50)

);

-- Inserting sample data into the Locations table

INSERT INTO Locations (LocationID, City, Country)

VALUES

(1, 'New York', 'USA'),

(2, 'London', 'UK'),

(3, 'Tokyo', 'Japan'),

(4, 'Sydney', 'Australia');

**Transactionl Table**

-- Creating the transactional table for Weather

CREATE TABLE Weather (

WeatherID INT PRIMARY KEY,

LocationID INT,

Date DATE,

Temperature FLOAT,

Humidity FLOAT

);

-- Inserting sample data into the Weather table

INSERT INTO Weather (WeatherID, LocationID, Date, Temperature, Humidity)

VALUES

(101, 1, '2023-01-05', 12.5, 65.3),

(102, 2, '2023-01-06', 8.9, 72.1),

(103, 1, '2023-01-07', 10.0, 60.5),

(104, 3, '2023-01-08', 5.5, 80.0),

(105, 4, '2023-01-09', 25.0, 55.8);

1. Now once these two tables are created in your database, try to connect these two database tables in Power BI.
2. Join these two tables with “WeatherID” columns in Power BI Relationship view.
3. Plot your weather data in Line chart in Power BI.