**Assignment: Creating a Time Dimension in SQL**

**Part 1: Creating the Time Dimension Table**

Create a new table called 'time\_dimension' with the following columns:

* date (date), also the primary key
* day (integer)
* month (integer)
* year (integer)
* quarter (integer)
* day\_of\_week (varchar)
* month\_of\_year (varchar)
* is\_weekend (boolean)

**Part 2: Inserting Sample Data**

Manually insert 10 rows of sample data (first 10 days of the 2023 calendar year) into the 'time\_dimension' table.

**Part 3: Basic Questions with Sample Data**

Answer the following questions with the sample data just entered:

* How many weekdays are there in the first 10 days of 2023?
* How many weekends are there in the first 10 days of 2023?

**Part 4: Populating the Time Dimension Table**

Populate the 'time\_dimension' table with dates from the years 2020 to 2025.

**Verify that the table has been populated correctly by answering the following questions:**

* How many days in total from the years 2020 to 2025?
* How many weekends are in the year 2024?
* How many weekdays are there in the third quarter of 2023?