

### Prompt 1: To create a data table

- Create a date table that has the dates from 03-01-2025 (March 1st, 2025) to 05-31-2025 (May 31st, 2025).

### Prompt 2: To create an exchange rate table

- Create an exchange\_rate table for the period from March 1st, 2025, to May 17th, 2025.
- Use the following API request sample to fetch historical exchange rates:
- `response = requests.get('https://openexchangerates.org/api/historical/2024-10-21.json?app_id=&symbols;=INR')`
- Replace the date for each in the URL with each date within the specified range.

### Prompt 3: Data cleaning and summarizing required data in one table (fact\_summary)

- 1. Load data from:
  - - fact\_order\_line table
  - - dim\_products sheet (skip first row, use second row as headers)
  - - dim\_customers sheet (skip first row, use second row as headers)
  - - Exchange Rate sheet (skip first row, use second row as headers)
- 2. Clean the data:
  - - Convert product\_id and customer\_id to numeric
  - - Strip whitespace from IDs
  - - Remove rows with NULL IDs
  - - Convert IDs to integers
  - - Convert dates to datetime
- 3. Merge the tables:
  - - Orders with products using product\_id
  - - Result with customers using customer\_id
  - - Result with exchange rates using order\_placement\_date
- 4. Calculate total amounts:
  - - For USD currency:  $\text{price\_USD} * \text{USD\_INR\_Rate} * \text{order\_qty}$
  - - For INR currency:  $\text{price\_INR} * \text{order\_qty}$
- 5. Clean final output:
  - - Drop intermediate columns: price\_USD, price\_INR, currency, Date, USD\_INR\_Rate
  - - Keep only essential columns: order details, IDs, dates, quantities, delivery information, and total\_amount (in INR)

### Prompt 4: Creating Business KPIs

- Create the following KPIs:
  - 1. Total Order Lines
  - 2. Line Fill Rate
  - 3. Volume Fill Rate
  - 4. Total Orders
  - 5. On Time Delivery %
  - 6. In Full Delivery %
  - 7. On Time In Full %

### Prompt 5: Top Customers

- Show the top 5 customers based on order value and their OTIF %, IF %, OT %.
- Include customer name, customer ID, and city in the table.

### Prompt 6: Top Customers (India)

- Show the top 5 customers in India based on order value and their OTIF %, IF %, OT %.

- Include customer name, customer ID, and city in the table.