Instruction

- Make sure to follow the standards and naming conventions while creating tables, columns, etc.

- Please create a database schema before starting SQL operations if the schema doesn't exist.

- Ensure you set the database scheme you want to work with before starting SQL operations.

- Make sure to include audit columns with default values when creating tables so the system will use them if the user provides no value.

- Be sure to include the necessary columns when creating tables to maintain the history of the event or transaction.

1.Order By

1. List all customers sorted by their names in ascending order.

2. Retrieve all products sorted by their prices in descending order.

3. Show all sales sorted by their IDs in ascending order.

4. Display all sales details sorted by product IDs in descending order.

5. List all customers sorted by their country in ascending order.

6. Retrieve all products sorted by their categories in ascending order.

7. Show all sales sorted by their dates in descending order.

8. Display all sales details sorted by quantity in ascending order.

10. Retrieve all products sorted by their names in ascending order, then by their prices in descending order.

2. Group by and Having Clause

1. Find the total number of orders placed by each customer.

2. Retrieve the average price of products in each category.

3. Show the total sales amount for each customer who has spent more than $500.

4. Display the count of orders placed in each year.

5. List the categories where the average price of products is more than $100.

6. Show the number of orders placed by each customer in the year 2023.

7. Find the number of products in each category with an average price greater than $50.

8. List the categories where the total sales amount is greater than $1000.

9. Retrieve the count of orders placed on each day of the week.

10. List the customers who have placed more than 3 orders and spent more than $1000 in total.

11. Show the average price of products for each category where the number of products is greater than 5.

12. Display the total sales amount for each month in the year 2024 where the total sales amount is greater than $2000.

Countries by Initial Letter

- Write a query to count the number of countries grouped by the first letter of their names. Only include groups with more than 5 countries.

Recent Country Updates

- Query the number of countries updated in each month of the year. Display only the months with more than 2 updates.

Currencies Created by User

- Count how many currencies each user has created. Show results for users who have created more than 3 currencies.

Currency Updates per Year

- Assuming `dsai_d_currency_duplicate1` has an `Updated_DT` column, find how many currencies were updated each year. Display years with at least 2 updates.

Average Length of Country Names

- Calculate the average length of country names. Show only the average lengths greater than 10 characters.

Countries with Multiple Currencies

- Assuming a relationship between countries and currencies, list the countries that have more than one currency.

Latest Country Update by Year

- For each year, find the latest country update. Display years with at least one update.

Currencies Without Recent Updates

- Count how many currencies have not been updated in the last 5 years. Include only those with at least 1 such currency.

Users with Recent Currency Creations

- Show users who have created a currency in the last year. Include those with at least 2 creations.

Frequent Currency Name Lengths

- Find the most common lengths of currency names. Include lengths that appear more than 3 times.

Count of Countries Updated After a Specific Date

- Display the count of countries updated after January 1, 2020, grouped by year. Include groups with at least one country.

Distinct Currencies by Creation Year

- Assuming a `Creation_Year` column, count the distinct number of currencies created each year. Display years with more than 4 distinct currencies.

Average Update Interval for Countries

- Calculate the average time between updates for countries. Show those with an average interval of less than 2 years.

Maximum and Minimum Currency Name Length

- For each user, find the maximum and minimum length of currency names they have created. Include users who have created more than 2 currencies.

Countries with Specific Update Patterns

- Count countries that have been updated in both January and December of any year. Include counts greater than 1.

Yearly Creation Count for Currencies

- Assuming a `Created_DT` column, find how many currencies were created each year. Include years with at least 5 creations.

Group by Currency Code Prefix

- Assuming currency codes have prefixes indicating their region, count how many currencies belong to each region. Include regions with more than 2 currencies.

Users Updating Currencies in Specific Months

- Show users who have updated currencies in both January and July of any year. Include those with at least one update in each month.

Average Country Name Length by First Letter

- Calculate the average length of country names, grouped by their first letter. Display only letters with an average name length greater than 7.

Countries with Longest Time Since Last Update

- Find the country with the longest time since its last update for each year. Include only years with at least one update.