

HUBBLEMIND | SQL Problem Statements

Dataset Description:

This dataset contains customer data, including demographic information, purchase history, and responses to marketing campaigns. The data can be used to analyse customer behaviour, segment customers, and evaluate the effectiveness of marketing strategies.

Dataset Link: [Kaggle](#)

Importing Data into MySQL

1. Create a new schema and name it as "**ecom**".
2. Import the dataset:
 - a. Download the dataset from Kaggle.
 - b. Open MySQL Workbench.
 - c. Select the Table Data Import Wizard under the Server menu.
 - d. Choose the downloaded CSV file and follow the wizard steps to import the data into a table named **customer_data**.

Problem Statements:

1. Count the number of customers:
Task: Count the total number of customers in the dataset.
2. Find the average income:
Task: Calculate the average income of all customers.
3. List customers with income above \$50,000:
Task: Retrieve the IDs of customers whose income is above \$50,000.
4. Find customers with more than 3 web visits per month:
Task: Identify customers who visit the website more than three times a month.
5. List customers who have accepted at least one campaign:
Task: Retrieve customers who have accepted at least one marketing campaign.
6. Count customers with complaints:
Task: Count the number of customers who have made complaints.

7. Calculate total amount spent on wines:
Task: Calculate the total amount spent on wines by all customers.
8. Find customers with no children at home:
Task: List customers who do not have any kids or teenagers at home.
9. Determine the average age of customers:
Task: Calculate the average age of customers.
10. List customers by marital status:
Task: Group customers by their marital status and count the number of customers in each group.
11. Find the most recent customer:
Task: Identify the customer who joined most recently.
12. Calculate the total amount spent on each product category:
Task: Calculate the total amount spent on each product category (Wines, Fruits, Meat, Fish, Sweets, Gold).
13. Find the average number of web visits for each customer:
Task: Calculate the average number of web visits per month for each customer.
14. Identify high-value customers:
Task: List customers who have spent more than \$2,000 in total.
15. List top 5 customers by wine purchases:
Task: Identify the top 5 customers who spent the most on wines.
16. Find the most common education level:
Task: Determine the most common education level among customers.
17. Identify customers with high recency:
Task: List customers who have recently interacted with the company (Recency < 30 days).
18. Calculate the average number of accepted campaigns per customer:
Task: Determine the average number of campaigns accepted by customers.
19. Find customers with the highest total purchases:
Task: Identify customers with the highest total number of purchases.
20. List customers by their response to the last campaign:
Task: Group customers based on their response to the last campaign.

Documentation:

Submission Instructions

- **Execute the queries:** Run each of the above queries in MySQL.
- **Take screenshots:** Capture screenshots of the queries and their outputs.
- **Document findings:** Write a clear and concise explanation of what each query result shows.
- **Compile your work:** Combine the screenshots and explanations into a single document.
- **Submit your work:** Ensure your document is well-organised and submit it for review at internships@hubblemind.com

