1. Retrieve all customer records.

Output

| customer\_id | first\_name | last\_name | age | country |
| --- | --- | --- | --- | --- |
| 1 | John | Doe | 31 | USA |
| 2 | Robert | Luna | 22 | USA |
| 3 | David | Robinson | 22 | UK |
| 4 | John | Reinhardt | 25 | UK |

Get details of customers from the UK.

| customer\_id | first\_name | last\_name | age | country |
| --- | --- | --- | --- | --- |
| 3 | David | Robinson | 22 | UK |
| 4 | John | Reinhardt | 25 | UK |

Get customers older than 25 and from either the USA or UK

| customer\_id | first\_name | last\_name | age | country |
| --- | --- | --- | --- | --- |
| 1 | John | Doe | 31 | USA |

Find customers aged between 22 and 28.

| customer\_id | first\_name | last\_name | age | country |
| --- | --- | --- | --- | --- |
| 2 | Robert | Luna | 22 | USA |
| 3 | David | Robinson | 22 | UK |
| 4 | John | Reinhardt | 25 | UK |
| 5 | Betty | Doe | 28 | UAE |

Get customers from either USA or UAE.

| customer\_id | first\_name | last\_name | age | country |
| --- | --- | --- | --- | --- |
| 1 | John | Doe | 31 | USA |
| 2 | Robert | Luna | 22 | USA |
| 5 | Betty | Doe | 28 | UAE |

Find customers whose first name starts with 'Jo'.

| customer\_id | first\_name | last\_name | age | country |
| --- | --- | --- | --- | --- |
| 1 | John | Doe | 31 | USA |
| 4 | John | Reinhardt | 25 | UK |

List distinct countries from the Customers table.

| country |
| --- |
| USA |
| UK |
| UAE |

Get the top 3 highest value orders

| order\_id | item | amount | customer\_id |
| --- | --- | --- | --- |
| 3 | Monitor | 12000 | 3 |
| 1 | Keyboard | 400 | 4 |
| 4 | Keyboard | 400 | 1 |

Select orders where amount is not null.

| order\_id | item | amount | customer\_id |
| --- | --- | --- | --- |
| 1 | Keyboard | 400 | 4 |
| 2 | Mouse | 300 | 4 |
| 3 | Monitor | 12000 | 3 |
| 4 | Keyboard | 400 | 1 |
| 5 | Mousepad | 250 | 2 |

Show each customer’s name and a category based on age:

Under 25 → 'Youth'

1. o 30 → 'Adult'

Above 30 → 'Senior'

| first\_name | last\_name | age | age\_group |
| --- | --- | --- | --- |
| John | Doe | 31 | Senior |
| Robert | Luna | 22 | Youth |
| David | Robinson | 22 | Youth |
| John | Reinhardt | 25 | Adult |
| Betty | Doe | 28 | Adult |

#-------------------------------------------------------------

Show each customer's full name in the format LASTNAME, firstname using string functions.

| formatted\_name |
| --- |
| DOE, john |
| LUNA, robert |
| ROBINSON, david |
| REINHARDT, john |
| DOE, betty |

Round off all order amounts to the nearest hundred and show ceiling and floor values as well.

| order\_id | amount | rounded\_amount | ceiling\_amount | floor\_amount |
| --- | --- | --- | --- | --- |
| 1 | 400 | 400 | 400 | 400 |
| 2 | 300 | 300 | 300 | 300 |
| 3 | 12000 | 12000 | 12000 | 12000 |
| 4 | 400 | 400 | 400 | 400 |
| 5 | 250 | 250 | 250 |  |

Compare each order's amount to the average and return "Above Average" or "Below Average".

| order\_id | amount | comparison\_result |
| --- | --- | --- |
| 1 | 400 | Below Average |
| 2 | 300 | Below Average |
| 3 | 12000 | Above Average |
| 4 | 400 | Below Average |
| 5 | 250 | Below Average |

What is the total, average, min, and max amount from Orders?

| total\_amount | average\_amount | minimum\_amount | maximum\_amount |
| --- | --- | --- | --- |
| 13350 | 2670 | 250 | 12000 |

**Show how many orders each customer has placed, but only include customers who placed more than 1 order.**

| customer\_id | total\_orders |
| --- | --- |
| 4 | 2 |

Show how many orders each customer has placed (more than 1), and sort the result by total\_orders in descending order.

| customer\_id | total\_orders |
| --- | --- |
| 4 | 2 |

Show the total amount spent by each customer (only if they spent more than ₹500), and order by customer ID.

| customer\_id | total\_spent |
| --- | --- |
| 3 | 12000 |
| 4 | 700 |

Show how many **Mouse or Keyboard** orders each customer placed (if more than 1), ordered by number of orders descending

| customer\_id | total\_orders |
| --- | --- |
| 4 | 2 |

**Subquery—**

Get customers who have placed an order amount greater than the **average order amount**

| customer\_id | first\_name | last\_name | age | country |
| --- | --- | --- | --- | --- |
| 3 | David | Robinson | 22 | UK |

Subquery in SELECT clause

Show each order and the **customer's first name** using a subquery.

| order\_id | item | amount | customer\_name |
| --- | --- | --- | --- |
| 1 | Keyboard | 400 | John |
| 2 | Mouse | 300 | John |
| 3 | Monitor | 12000 | David |
| 4 | Keyboard | 400 | John |
| 5 | Mousepad | 250 | Robert |

**Subquery with IN operator**

Find names of customers who have **received a shipment** (Delivered status).

| first\_name | last\_name |
| --- | --- |
| John | Doe |
| David | Robinson |

Get all customers **who have placed at least one order**.

| customer\_id | first\_name | last\_name | age | country |
| --- | --- | --- | --- | --- |
| 1 | John | Doe | 31 | USA |
| 2 | Robert | Luna | 22 | USA |
| 3 | David | Robinson | 22 | UK |
| 4 | John | Reinhardt | 25 | UK |

Get all customers **who have never placed any order**.

| customer\_id | first\_name | last\_name | age | country |
| --- | --- | --- | --- | --- |
| 5 | Betty | Doe | 28 | UAE |

#----------------------------------------------------------------------------------------------

Joins---

Show customer names and their ordered items.

| first\_name | last\_name | item |
| --- | --- | --- |
| John | Reinhardt | Keyboard |
| John | Reinhardt | Mouse |
| David | Robinson | Monitor |
| John | Doe | Keyboard |
| Robert | Luna | Mousepad |

Show all customers and their orders (if any). If no order, show NULL

| first\_name | last\_name | item |
| --- | --- | --- |
| John | Doe | Keyboard |
| Robert | Luna | Mousepad |
| David | Robinson | Monitor |
| John | Reinhardt | Keyboard |
| John | Reinhardt | Mouse |
| Betty | Doe | NULL |

Show customer names and items they ordered, but only for orders above ₹500.

| first\_name | item | amount |
| --- | --- | --- |
| David | Monitor | 12000 |

Show order details along with customer country

| order\_id | Item | amount | country |
| --- | --- | --- | --- |
| 1 | Keyboard | 400 | UK |
| 2 | Mouse | 300 | UK |
| 3 | Monitor | 12000 | UK |
| 4 | Keyboard | 400 | USA |
| 5 | Mousepad | 250 | USA |

Show customers who have a pending shipment

| first\_name | last\_name | status |
| --- | --- | --- |
| Robert | Luna | Pending |
| John | Reinhardt | Pending |
| Betty | Doe | Pending |

**Show customers who placed both a ‘Mouse’ and a ‘Keyboard’ order** (self-join concept):

| first\_name | last\_name |
| --- | --- |
| John | Reinhardt |

**Show customers who haven’t received any delivery yet.**

| **first\_name** | **last\_name** |
| --- | --- |
| **Robert** | **Luna** |
| **John** | **Reinhardt** |
| **Betty** | **Doe** |

Show all customers and their order amount (if any). If a customer has no order, show amount as 0.

| customer\_id | first\_name | last\_name | order\_amount |
| --- | --- | --- | --- |
| 1 | John | Doe | 400 |
| 2 | Robert | Luna | 250 |
| 3 | David | Robinson | 12000 |
| 4 | John | Reinhardt | 300 |
| 4 | John | Reinhardt | 400 |
| 5 | Betty | Doe | 0 |

Assign a shipping priority based on status:

* If Delivered → ‘Low’
* If Pending and order amount > 1000 → ‘High’

Else → ‘Medium’

| shipping\_id | status | first\_name | amount | shipping\_priority |
| --- | --- | --- | --- | --- |
| 1 | Pending | Robert | 250 | Medium |
| 2 | Pending | John | 300 | Medium |
| 2 | Pending | John | 400 | Medium |
| 3 | Delivered | David | 12000 | Low |
| 4 | Pending | Betty |  | Medium |
| 5 | Delivered | John | 400 | Low |

Get all customers who have ordered items that cost more than the average order amount.

| customer\_id | first\_name | last\_name | age | country |
| --- | --- | --- | --- | --- |
| 3 | David | Robinson | 22 | UK |

Show unique items ordered, sorted alphabetically. Limit result to 5 items

| Item |
| --- |
| Keyboard |
| Monitor |
| Mouse |
| Mousepad |