

--Show all customers from India

```
SELECT *  
FROM Customers  
WHERE country = 'India';
```

--List all orders placed after 2023-02-01

```
SELECT *  
FROM Orders  
WHERE order_date > '2023-02-01'  
ORDER BY order_date;
```

Output:

customer_id	name	email	country
3	Charlie	charlie@example.com	India
7	Grace	grace@example.com	India

order_id	customer_id	product_id	quantity	order_date
1006	6	101	1	2023-02-05
1007	7	104	2	2023-02-10
1008	8	103	3	2023-02-15
1009	9	102	1	2023-02-20
1010	10	105	6	2023-02-25
1011	1	106	2	2023-03-01
1012	3	104	1	2023-03-05
1013	5	103	4	2023-03-10
1014	6	105	5	2023-03-15
1015	7	102	3	2023-03-20

```
-- Order details with customer and product names
```

```
SELECT
```

```
    o.order_id,  
    c.name AS customer_name,  
    p.name AS product_name,  
    o.quantity,  
    o.order_date
```

```
FROM Orders o
```

```
JOIN Customers c ON o.customer_id = c.customer_id
```

```
JOIN Products p ON o.product_id = p.product_id;
```

order_id	customer_name	product_name	quantity	order_date
1001	Alice	Laptop	1	2023-01-10
1006	Frank	Laptop	1	2023-02-05
1003	Charlie	Phone	2	2023-01-20
1009	Ivy	Phone	1	2023-02-20
1015	Grace	Phone	3	2023-03-20
1002	Bob	Book	5	2023-01-15
1008	Henry	Book	3	2023-02-15
1013	Eva	Book	4	2023-03-10
1007	Grace	Tablet	2	2023-02-10
1012	Charlie	Tablet	1	2023-03-05
1004	David	Pen	10	2023-01-25
1010	Jack	Pen	6	2023-02-25
1014	Frank	Pen	5	2023-03-15
1005	Eva	Headphones	1	2023-02-01
1011	Alice	Headphones	2	2023-03-01

-- Create view for order summary

CREATE VIEW OrderSummary AS

SELECT

o.order_id,
c.name AS customer_name,
p.name AS product_name,
o.quantity,
p.price,
(o.quantity * p.price) AS total_amount

FROM Orders o

JOIN Customers c ON o.customer_id = c.customer_id

JOIN Products p ON o.product_id = p.product_id;

-- Select from view

SELECT * FROM OrderSummary;

order_id	customer_name	product_name	quantity	price	total_amount
1001	Alice	Laptop	1	900.00	900.00
1006	Frank	Laptop	1	900.00	900.00
1003	Charlie	Phone	2	500.00	1000.00
1009	Ivy	Phone	1	500.00	500.00
1015	Grace	Phone	3	500.00	1500.00
1002	Bob	Book	5	20.00	100.00
1008	Henry	Book	3	20.00	60.00
1013	Eva	Book	4	20.00	80.00
1007	Grace	Tablet	2	300.00	600.00
1012	Charlie	Tablet	1	300.00	300.00
1004	David	Pen	10	5.00	50.00
1010	Jack	Pen	6	5.00	30.00
1014	Frank	Pen	5	5.00	25.00
1005	Eva	Headphones	1	100.00	100.00
1011	Alice	Headphones	2	100.00	200.00

```
-- Customers who placed more than one order
SELECT name
FROM Customers
WHERE customer_id IN (
    SELECT customer_id
    FROM Orders
    GROUP BY customer_id
    HAVING COUNT(order_id) > 1
);
```

```
+-----+
| name  |
+-----+
| Alice |
| Charlie |
| Eva   |
| Frank |
| Grace |
+-----+
```

-- LEFT JOIN: Show all customers and their orders (if any)

```
SELECT
  c.customer_id,
  c.name AS customer_name,
  o.order_id,
  o.order_date
FROM Customers c
LEFT JOIN Orders o ON c.customer_id = o.customer_id;
```

customer_id	customer_name	order_id	order_date
1	Alice	1001	2023-01-10
1	Alice	1011	2023-03-01
2	Bob	1002	2023-01-15
3	Charlie	1003	2023-01-20
3	Charlie	1012	2023-03-05
4	David	1004	2023-01-25
5	Eva	1005	2023-02-01
5	Eva	1013	2023-03-10
6	Frank	1006	2023-02-05
6	Frank	1014	2023-03-15
7	Grace	1007	2023-02-10
7	Grace	1015	2023-03-20
8	Henry	1008	2023-02-15
9	Ivy	1009	2023-02-20
10	Jack	1010	2023-02-25

--Total quantity of products ordered by each customer (with names)

```
SELECT
  c.customer_id,
  c.name AS customer_name,
  SUM(o.quantity) AS total_quantity
FROM Orders o
JOIN Customers c ON o.customer_id = c.customer_id
GROUP BY c.customer_id, c.name;
```

--Average price of products in each category

```
SELECT
  category,
  ROUND(AVG(price), 2) AS avg_price
FROM Products
GROUP BY category;
```

customer_id	customer_name	total_quantity
1	Alice	3
2	Bob	5
3	Charlie	3
4	David	10
5	Eva	5
6	Frank	6
7	Grace	5
8	Henry	3
9	Ivy	1
10	Jack	6
category	avg_price	
Electronics	450.00	
Stationery	12.50	