## Implementation in MYSQL

**Query 1:** List all the customer names and their corresponding order IDs from the sales orders.

SELECT c.name, s.order\_id FROM customer c JOIN salesorder s ON c.c\_id = s.c\_id;

Result Grid 🎚 🙌 F	ilter Rows: Q Search Export:
name	order_id
Paddy Ruppelin	1
Sharona Foulcher	2
Agnella Pinnere	3
Ellswerth Yellowley	4
Emile Gery	5
Linette Bonallick	6
Magda Ferne	7
Jerrine Tyne	8
Ellswerth Yellowley	9
Meier Wyre	10
Ellswerth Yellowley	11
Magda Ferne	12
Meier Wyre	13
Anabel Ferres	14
Brose Sales	15
Euphemia Money	16
Ivett Gethings	17
Emile Gery	18
Alikee Halsted	19
Anabel Ferres	20

**Query 2:** Get a list of all customers, along with their payment IDs, even if they haven't made a payment yet.

SELECT c.name, p.payment\_id FROM customer c LEFT JOIN payments p ON c.c\_id = p.c\_id;

Result Grid 1	ilter Rows: Q Search Export:
name	payment_id
Newton Harnor	20
Newton Harnor	9
Tomaso Voisey	NULL
Margery Glover	19
Ellswerth Yellowley	NULL
Brose Sales	NULL
Alastair Pauluzzi	13
Alastair Pauluzzi	12
Alastair Pauluzzi	5
Paddy Ruppelin	NULL
Emile Gery	10
Anabel Ferres	7
Euphemia Money	6
Meier Wyre	1
Jerrine Tyne	11
Jerrine Tyne	4
Ivett Gethings	2
Alikee Halsted	17
Alikee Halsted	8
Magda Ferne	16
Magda Ferne	3
Agnella Pinnere	NULL
Chris Steels	NULL
Sharona Foulcher	15
Bunny Hans	18
Linette Bonallick	14

**Query 3:** List all products and include any purchase order details (if available), showing the product name and quantity purchased.

SELECT p.product\_name, pod.quantity
FROM product p
RIGHT JOIN purchase\_order\_detail pod ON p.Product\_id = pod.Product\_id;

esult Grid 🔢 🐧	Filter Ro	ws:	Q Se	earch	Ex	port:	
product_name	quantity						
Fox	8						
2500 Club Coupe	1						
62	7						
Amanti	11						
Amanti	9						
Expedition	10						
T100	15						
Tacoma	5						
62	14						
T100	15						
Fox	9						
E350	6						
330	10						
Ram 1500	1						
Amanti	9						
T100	9						
Elise	6						
Ram Wagon B250	10						
CC	13						
2500 Club Coupe	14						
Fox	11						
Tracker	6						
Cherokee	9						
Supra	7						
Expedition	5						
62	11						
Tacoma	11						
CR-X	7						

**Query 4:** Find all product names and their quantities from both purchase order details and sales order details.

SELECT p.product\_name, pod.quantity
FROM product p
JOIN purchase\_order\_detail pod ON p.Product\_id = pod.Product\_id
UNION
SELECT p.product\_name, sod.quntity
FROM product p
JOIN sales order detail sod ON p.Product id = sod.Product id;

Result Grid	Filter Rows: Q Se	arch Export:
product_name	quantity	
Fox	8	
2500 Club Coupe	1	
62	7	
Amanti	11	
Amanti	9	
Expedition	10	
T100	15	
Tacoma	5	
62	14	
Fox	9	
E350	6	
330	10	
Ram 1500	1	
T100	9	
Elise	6	
Ram Wagon B250	10	
CC	13	
2500 Club Coupe	14	
Fox	11	
Tracker	6	
Cherokee	9	
Supra	7	
Expedition	5	
62	11	
Tacoma	11	
CR-X	7	
330	20	
T100	10	

Query 5: Find all the customers who have placed orders with a total amount greater than 500\$.

```
SELECT c.name, c.email
FROM customer c
WHERE c.c_id IN (
SELECT so.c_id
FROM SalesOrder so
JOIN sales_order_detail sod ON so.order_id = sod.order_id
GROUP BY so.c_id
HAVING SUM(sod.quntity * sod.unit_price) > 500
);
```

Result Grid III 🛟 Filte	er Rows: Q Search	Export:
name	email	
Ellswerth Yellowley	ellswerth.yellowley@yahoo.com	
Brose Sales	brose.sales@juno.com	
Paddy Ruppelin	paddy.ruppelin@hotmail.com	
Emile Gery	emile.gery@yahoo.com	
Anabel Ferres	anabel.ferres@yahoo.com	
Euphemia Money	euphemia.money@hotmail.fr	
Meier Wyre	meier.wyre@yahoo.com	
Jerrine Tyne	jerrine.tyne@hotmail.com	
Ivett Gethings	ivett.gethings@msn.com	
Alikee Halsted	alikee.halsted@yahoo.com	
Magda Ferne	magda.ferne@shaw.ca	
Sharona Foulcher	sharona.foulcher@gmail.com	
=		

**Query 6:** Find the names of customers who have made a payment greater than the average payment amount.

```
SELECT c.name
FROM customer c
WHERE c.c_id IN (
    SELECT p.c_id
    FROM payments p
    WHERE p.amount > (SELECT AVG(amount) FROM payments)
);
```

Result Grid	Ⅲ <b>↔</b> Fi	lter Rows: Q	Search	Export:
name				
Alastair Pa	uluzzi			
Jerrine Tyn	ne			
Magda Fer	ne			
Sharona Fo	oulcher			

**Query 7:** Find the total number of orders placed by each customer and show only those who have placed more than 2 orders.

```
SELECT c.name, COUNT(s.order_id) AS Total_Orders FROM customer c
JOIN salesorder s ON c.c_id = s.c_id
GROUP BY c.name
HAVING COUNT(s.order_id) > 2;
```

Result Grid	Filter Rows: Q Search Export:
name	Total_Orders
Ellswerth Yellowley	3

**Query 8:** List the total revenue generated from each product (unit price \* quantity) in all sales orders.

SELECT p.product\_name, SUM(sod.quntity \* sod.unit\_price) AS Total\_Revenue FROM product p

JOIN sales\_order\_detail sod ON p.Product\_id = sod.Product\_id

GROUP BY p.product\_name;

esult Grid 🔢 🐧	Filter Rows:	Q Search	Export:
product_name	Total_Revenue		
E350	2050		
Ram Wagon B250	1740		
T100	3116		
Tracker	3458		
Cherokee	2502		
CR-X	2988		
62	2454		
Ram 1500	1970		
330	2686		
2500	2214		
Tacoma	3342		
XLR	1658		
Wrangler	2030		
Expedition	3296		
2500 Club Coupe	2730		
Amanti	2464		
CC	860		
Elise	1686		
Supra	594		
Fox	286		

**Query 9:** Find the names of all customers who have made at least one order that required a delivery.

```
SELECT c.name
FROM customer c
WHERE EXISTS (
SELECT 1
FROM salesorder s
JOIN delivery d ON s.order_id = d.order_id
WHERE s.c_id = c.c_id
);
```

Result Grid	Rows: Q Search	Export:
name		
Ellswerth Yellowley		
Brose Sales		
Paddy Ruppelin		
Emile Gery		
Anabel Ferres		
Euphemia Money		
Jerrine Tyne		
Alikee Halsted		
Magda Ferne		
Agnella Pinnere		
Sharona Foulcher		
Linette Bonallick		

Query 10: Retrieve the list of customers who have not made any payments yet.

```
SELECT c.name, c.email
FROM customer c
WHERE NOT EXISTS (
SELECT 1
FROM payments p
WHERE p.c_id = c.c_id
);
```

Result Grid III 🛟 Fil	ter Rows: Q Search	Export:
name	email	
Tomaso Voisey	tomaso.voisey@yahoo.co.uk	
Ellswerth Yellowley	ellswerth.yellowley@yahoo.com	
Brose Sales	brose.sales@juno.com	
Paddy Ruppelin	paddy.ruppelin@hotmail.com	
Agnella Pinnere	agnella.pinnere@hotmail.com	
Chris Steels	chris.steels@yahoo.com	