

```
-- selecting data from tables
select * from Customers
select * from Products
select * from Orders

-- Where
select first_name, last_name, country from Customers where country='UK'
select product_name, price, stock from Products where price>500 and stock>=25
```

110 %

Results Messages

	product_id	product_name	category	price	stock
1	1	Smartphone X	Electronics	699.99	50
2	2	Laptop Pro	Electronics	1299.99	30
3	3	Wireless Earbuds	Electronics	89.99	100
4	4	Sports Shoes	Fashion	49.99	70
5	5	Men T-Shirt	Fashion	19.99	200
6	6	Blender Ultra	Home	59.99	40
7	7	Microwave Oven	Home	149.99	20
8	8	Office Chair	NULL	89.99	15

	order_id	customer_id	product_id	order_date	quantity	total_amount
1	1	1	1	2023-03-10	1	699.99
2	2	2	3	2023-03-11	2	179.98

✓ Query executed successfully.

```
-- Where  
select first_name, last_name, country from Customers where country='UK'  
select product_name, price, stock from Products where price>500 and stock>=25  
select order_id, quantity from Orders where quantity>1
```

110 %

Results Messages

	product_name	price	stock
1	Smartphone X	699.99	50
2	Laptop Pro	1299.99	30

	order_id	quantity
1	2	2
2	5	3
3	9	2
4	14	2
5	19	4

✓ Query executed successfully.

```
--Order by
```

```
select * from Customers order by country asc
```

```
select * from Products order by stock
```

```
select * from Orders order by product_id desc
```

110 %

Results

Messages

	product_id	product_name	category	price	stock
1	10	Coffee Maker	Home	39.99	NULL
2	8	Office Chair	NULL	89.99	15
3	13	Vacuum Cleaner	Home	89.99	18
4	7	Microwave Oven	Home	149.99	20
5	15	Jacket	NULL	79.99	25
6	9	LED Monitor	Electronics	199.99	25
7	2	Laptop Pro	Electronics	1299.99	30
8	12	Running Watch	Electronics	129.99	35

	order_id	customer_id	product_id	order_date	quantity	total_amount
1	13	13	15	2023-03-22	1	79.99
2	16	16	14	2023-03-25	NULL	NULL

✓ Query executed successfully.

```
--Group by ,Having  
select first_name from Customers group by first_name  
select country from Customers group by country having country='UK'
```

```
select category from Products group by category  
select price from Products group by price having price <=1000
```

```
select total_amount from Orders group by total_amount  
select quantity from Orders group by quantity having quantity>1
```

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Results Messages

	category
1	NULL
2	Electronics
3	Fashion
4	Home

	price
1	19.99
2	24.99
3	29.99
4	39.99
5	49.99
6	59.99

Query executed successfully.

```
-- Joins
select * from Customers c inner join Products p on c.customer_id=p.product_id
select * from Customers c left join Orders o on c.customer_id=o.order_id
select * from Products p right join Orders o on p.product_id=o.order_id
select * from Orders o full join Products p on o.order_id=p.product_id
select * from Customers c full join Orders o on c.customer_id=o.customer_id full join Products p on o.product_id=p.product_id
```

110 %

Results Messages

	customer_id	first_name	last_name	gender	age_group	signup_date	country	order_id	customer_id	product_id	order_date	quantity	total_amount
1	1	John	Smith	Male	26-35	2023-01-10	USA	1	1	1	2023-03-10	1	699.99
2	2	Sarah	Williams	Female	18-25	2023-01-11	UK	2	2	3	2023-03-11	2	179.98
3	3	Mike	Brown	Male	26-35	2023-01-12	Canada	3	3	5	2023-03-12	1	19.99
4	4	Linda	Johnson	Female	NULL	2023-01-13	USA	4	4	2	2023-03-13	1	1299.99
5	5	David	Jones	Male	36-45	2023-01-14	NULL	5	5	4	2023-03-14	3	149.97
6	6	Emma	Taylor	Female	26-35	2023-01-15	Australia	6	6	1	2023-03-15	NULL	NULL
7	7	James	NULL	Male	18-25	2023-01-16	USA	7	7	8	2023-03-16	1	89.99
8	8	Sophia	Moore	Female	26-35	2023-01-17	Canada	8	8	10	2023-03-17	1	39.99

	product_id	product_name	category	price	stock	order_id	customer_id	product_id	order_date	quantity	total_amount
1	1	Smartphone X	Electronics	699.99	50	1	1	1	2023-03-10	1	699.99
2	2	Laptop Pro	Electronics	1299.99	30	2	2	3	2023-03-11	2	179.98

✓ Query executed successfully.

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```

--Subquery
select o.* from
(select *,row_number() over(order by total_amount desc) as Row_Num from Orders) o
select o.* from
(select *,row_number() over(partition by quantity order by total_amount desc) as Row_Num from Orders) o

select p.* from
(select *,rank() over(order by stock) as Rank from Products) p
select p.* from
(select *,rank() over(partition by category order by stock) as Rank from Products) p

select c.* from

```

110 %

Results Messages

	product_id	product_name	category	price	stock	Rank
1	10	Coffee Maker	Home	39.99	NULL	1
2	8	Office Chair	NULL	89.99	15	2
3	13	Vacuum Cleaner	Home	89.99	18	3
4	7	Microwave Oven	Home	149.99	20	4
5	15	Jacket	NULL	79.99	25	5
6	9	LED Monitor	Electronics	199.99	25	5
7	2	Laptop Pro	Electronics	1299.99	30	7
8	12	Running Watch	Electronics	129.99	35	8

	product_id	product_name	category	price	stock	Rank
1	8	Office Chair	NULL	89.99	15	1
2	15	Jacket	NULL	79.99	25	2

✔ Query executed successfully.

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```
-- Aggegratge functions
select sum(price) as Total_sum from Products
select avg(total_amount) as Average from Orders
select round(avg(total_amount),3) as Average from Orders
select sum(p.stock) as total,avg(o.quantity) as finalavg from Products p join Orders o on p.product_id=o.order_id
select min(price)as minimum from Products
select max(quantity) as maximum from Orders
```

10 %

Results Messages

	total	finalavg
1	768	1

	minimum
1	19.99

	maximum
1	4

Query executed successfully.

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