

Task 3: Writing Basic SELECT Queries

-- 1. Select all columns from the customer table

```
select * from customer;
```

Results

Query #1 Execution time: 0.27ms

| customer_id | name | email | phone | address | pincode |
|-------------|----------------|---------------------------|----------------|-----------------------|---------|
| 1 | John Peterson | john.peterson@example.com | +932025550147 | 1407OakStreet | 20001 |
| 2 | Emma Johansson | emma.johansson@example.se | +46 709123456 | Vasagatan 12 | 11120 |
| 3 | Liam McCarthy | liam.mccarthy@example.ie | +35 3851234567 | 32O'Connell St | 90901 |
| 4 | Sofia Rossi | sofia.rossi@example.it | +39 347890122 | ViaRoma55,Milan,Italy | 20121 |

-- 2. Select specific columns

```
select name, address, pincode from customer;
```

Query #2 Execution time: 0.16ms

| name | address | pincode |
|----------------|-----------------------|---------|
| John Peterson | 1407OakStreet | 20001 |
| Emma Johansson | Vasagatan 12 | 11120 |
| Liam McCarthy | 32O'Connell St | 90901 |
| Sofia Rossi | ViaRoma55,Milan,Italy | 20121 |

-- 3. Filter using WHERE

```
SELECT name, email from customer where customer_id=3;
```

Query #3 Execution time: 0.16ms

| name | email |
|---------------|--------------------------|
| Liam McCarthy | liam.mccarthy@example.ie |

```
SELECT * from customer where customer_id=3;
```

Query #4 Execution time: 0.16ms

| customer_id | name | email | phone | address | pincode |
|-------------|---------------|--------------------------|----------------|----------------|---------|
| 3 | Liam McCarthy | liam.mccarthy@example.ie | +35 3851234567 | 32O'Connell St | 90901 |

-- 4. Filter with AND

```
select * from customer where customer_id=1 and pincode=20001;
```

Query #5 Execution time: 0.39ms

| customer_id | name | email | phone | address | pincode |
|-------------|---------------|---------------------------|---------------|---------------|---------|
| 1 | John Peterson | john.peterson@example.com | +932025550147 | 1407OakStreet | 20001 |

-- 5. Filter with OR

```
SELECT * FROM customer
```

```
WHERE customer_id = 1 OR customer_id = 2;
```

Query #6 Execution time: 0.28ms

| customer_id | name | email | phone | address | pincode |
|-------------|----------------|---------------------------|---------------|---------------|---------|
| 1 | John Peterson | john.peterson@example.com | +932025550147 | 1407OakStreet | 20001 |
| 2 | Emma Johansson | emma.johansson@example.se | +46 709123456 | Vasagatan 12 | 11120 |

-- 6. Filter using LIKE

```
SELECT * FROM customer WHERE NAME LIKE '%H%';
```

Query #7 Execution time: 0.18ms

| customer_id | name | email | phone | address | pincode |
|-------------|----------------|---------------------------|----------------|----------------|---------|
| 1 | John Peterson | john.peterson@example.com | +932025550147 | 1407OakStreet | 20001 |
| 2 | Emma Johansson | emma.johansson@example.se | +46 709123456 | Vasagatan 12 | 11120 |
| 3 | Liam McCarthy | liam.mccarthy@example.ie | +35 3851234567 | 32O'Connell St | 90901 |

```
SELECT * FROM customer WHERE NAME LIKE 'j%';
```

Query #8 Execution time: 0.15ms

| customer_id | name | email | phone | address | pincode |
|-------------|---------------|---------------------------|---------------|---------------|---------|
| 1 | John Peterson | john.peterson@example.com | +932025550147 | 1407OakStreet | 20001 |

```
SELECT * FROM customer WHERE NAME LIKE '%y';
```

Query #9 Execution time: 0.17ms

| customer_id | name | email | phone | address | pincode |
|-------------|---------------|--------------------------|----------------|----------------|---------|
| 3 | Liam McCarthy | liam.mccarthy@example.ie | +35 3851234567 | 32O'Connell St | 90901 |

```
SELECT * FROM customer WHERE name NOT LIKE '%a%';
```

Query #10 Execution time: 0.16ms

| customer_id | name | email | phone | address | pincode |
|-------------|---------------|---------------------------|---------------|---------------|---------|
| 1 | John Peterson | john.peterson@example.com | +932025550147 | 1407OakStreet | 20001 |

SELECT * FROM customer WHERE NAME LIKE 'j%' and customer_id = 1;

Query #11 Execution time: 0.16ms

| customer_id | name | email | phone | address | pincode |
|-------------|---------------|---------------------------|---------------|---------------|---------|
| 1 | John Peterson | john.peterson@example.com | +932025550147 | 1407OakStreet | 20001 |

-- 7. Filter using BETWEEN

SELECT name, phone FROM customer WHERE customer_id BETWEEN 1 AND 3;

Query #12 Execution time: 0.17ms

| name | phone |
|----------------|----------------|
| John Peterson | +932025550147 |
| Emma Johansson | +46 709123456 |
| Liam McCarthy | +35 3851234567 |

-- 8. Sort results with ORDER BY

SELECT * FROM customer ORDER BY name;

Query #13 Execution time: 0.17ms

| customer_id | name | email | phone | address | pincode |
|-------------|----------------|---------------------------|----------------|-----------------------|---------|
| 2 | Emma Johansson | emma.johansson@example.se | +46 709123456 | Vasagatan 12 | 11120 |
| 1 | John Peterson | john.peterson@example.com | +932025550147 | 1407OakStreet | 20001 |
| 3 | Liam McCarthy | liam.mccarthy@example.ie | +35 3851234567 | 32O'Connell St | 90901 |
| 4 | Sofia Rossi | sofia.rossi@example.it | +39 347890122 | ViaRoma55,Milan,Italy | 20121 |

SELECT pincode FROM customer ORDER BY pincode;

Query #14 Execution time: 0.13ms

| pincode |
|---------|
| 11120 |
| 20001 |
| 20121 |
| 90901 |

SELECT * FROM customer ORDER BY name asc, address desc ;

Query #15 Execution time: 0.18ms

| customer_id | name | email | phone | address | pincode |
|-------------|----------------|---------------------------|----------------|-----------------------|---------|
| 2 | Emma Johansson | emma.johansson@example.se | +46 709123456 | Vasagatan 12 | 11120 |
| 1 | John Peterson | john.peterson@example.com | +932025550147 | 1407OakStreet | 20001 |
| 3 | Liam McCarthy | liam.mccarthy@example.ie | +35 3851234567 | 32O'Connell St | 90901 |
| 4 | Sofia Rossi | sofia.rossi@example.it | +39 347890122 | ViaRoma55,Milan,Italy | 20121 |

-- 9. Limit the number of results

```
SELECT *  
FROM customer  
WHERE customer_id IN (1, 3,4)  
ORDER BY name DESC  
LIMIT 2;
```

Query #16 Execution time: 0.29ms

| customer_id | name | email | phone | address | pincode |
|-------------|---------------|--------------------------|----------------|-----------------------|---------|
| 4 | Sofia Rossi | sofia.rossi@example.it | +39 347890122 | ViaRoma55,Milan,Italy | 20121 |
| 3 | Liam McCarthy | liam.mccarthy@example.ie | +35 3851234567 | 32O'Connell St | 90901 |

-- 10. Combining WHERE, ORDER BY, and LIMIT

```
SELECT * FROM customer WHERE customer_id BETWEEN 1 AND 4  
ORDER BY name  
LIMIT 3;
```

Query #17 Execution time: 0.29ms

| customer_id | name | email | phone | address | pincode |
|-------------|----------------|---------------------------|----------------|----------------|---------|
| 2 | Emma Johansson | emma.johansson@example.se | +46 709123456 | Vasagatan 12 | 11120 |
| 1 | John Peterson | john.peterson@example.com | +932025550147 | 1407OakStreet | 20001 |
| 3 | Liam McCarthy | liam.mccarthy@example.ie | +35 3851234567 | 32O'Connell St | 90901 |