TASK-3 SQL QUERIES

MR.Cooper Practice Assignment

Date : 01-05-2025
Submitted by : Srinithi S IT CIT

Table Creation ;

```
mysql> use johnson ;
Database changed
mysql> CREATE TABLE employees (
    ->      id INT PRIMARY KEY,
    ->      name VARCHAR(255),
    ->      department VARCHAR(100),
    ->      salary INT,
    ->      hire_date DATE,
    ->      city VARCHAR(100)
    -> );
Query OK, 0 rows affected (0.17 sec)

mysql> CREATE TABLE departments (
    ->      dept_name VARCHAR(100) PRIMARY KEY,
    ->      location VARCHAR(100)
    -> );
Query OK, 0 rows affected (0.21 sec)
```

Insert Values

```
mysql> INSERT INTO employees (id, name, department, salary, hire_date, city)
 VALUES
    -> (1, 'Priya Sharma', 'Sales', 50000, '2022-08-15', 'Mumbai'),
    -> (2, 'Rahul Verma', 'Marketing', 60000, '2023-01-20', 'Delhi'),
    -> (3, 'Sneha Gupta', 'Sales', 55000, '2022-11-01', 'Kolkata'),
    -> (4, 'Arjun Singh', 'Finance', 70000, '2023-05-10', 'Chennai'),
    -> (5, 'Deepika Patel', 'Marketing', 62000, '2023-03-25', 'Bangalore');
Query OK, 5 rows affected (0.04 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from employees ;
+----+---------------+------------+--------+------------+-----------+
| id | name          | department | salary | hire_date  | city      |
+----+---------------+------------+--------+------------+-----------+
|  1 | Priya Sharma  | Sales      |  50000 | 2022-08-15 | Mumbai    |
|  2 | Rahul Verma   | Marketing  |  60000 | 2023-01-20 | Delhi     |
|  3 | Sneha Gupta   | Sales      |  55000 | 2022-11-01 | Kolkata   |
|  4 | Arjun Singh   | Finance    |  70000 | 2023-05-10 | Chennai   |
|  5 | Deepika Patel | Marketing  |  62000 | 2023-03-25 | Bangalore |
+----+---------------+------------+--------+------------+-----------+
5 rows in set (0.02 sec)
```

```
mysql> select * from departments ;
+-----------+-----------+
| dept_name | location  |
+-----------+-----------+
| Finance   | South     |
| HR        | Central   |
| IT        | South     |
| Marketing | West      |
| Sales     | North     |
+-----------+-----------+
5 rows in set (0.01 sec)
```

```
mysql> SELECT name, salary FROM employees;
+---------------+--------+
| name          | salary |
+---------------+--------+
| Priya Sharma  |  50000 |
| Rahul Verma   |  60000 |
| Sneha Gupta   |  55000 |
| Arjun Singh   |  70000 |
| Deepika Patel |  62000 |
+---------------+--------+
5 rows in set (0.01 sec)
```

```
mysql> SELECT name, salary FROM employees WHERE department = 'Sales';
+--------------+--------+
| name         | salary |
+--------------+--------+
| Priya Sharma |  50000 |
| Sneha Gupta  |  55000 |
+--------------+--------+
2 rows in set (0.01 sec)
```

```
mysql> SELECT name, salary FROM employees WHERE salary > 60000;
+---------------+---------+
| name          | salary  |
+---------------+---------+
| Arjun Singh   |   70000 |
| Deepika Patel |   62000 |
+---------------+---------+
2 rows in set (0.00 sec)
```

```
mysql> SELECT name, hire_date FROM employees WHERE hire_date BETWEEN '2023-0
1-01' AND '2023-12-31';
+---------------+------------+
| name          | hire_date  |
+---------------+------------+
| Rahul Verma   | 2023-01-20 |
| Arjun Singh   | 2023-05-10 |
| Deepika Patel | 2023-03-25 |
+---------------+------------+
3 rows in set (0.01 sec)
```

```
mysql> SELECT DISTINCT department FROM employees;
+------------+
| department |
+------------+
| Sales      |
| Marketing  |
| Finance    |
+------------+
3 rows in set (0.02 sec)
```

```
mysql> SELECT name, salary FROM employees ORDER BY salary DESC;
+---------------+---------+
| name          | salary  |
+---------------+---------+
| Arjun Singh   |   70000 |
| Deepika Patel |   62000 |
| Rahul Verma   |   60000 |
| Sneha Gupta   |   55000 |
| Priya Sharma  |   50000 |
+---------------+---------+
5 rows in set (0.01 sec)
```

```
mysql> SELECT name FROM employees LIMIT 3 OFFSET 2;
+--------------+
| name         |
+--------------+
| Sneha Gupta  |
| Arjun Singh  |
| Deepika Patel |
+--------------+
3 rows in set (0.01 sec)

mysql> SELECT name FROM employees LIMIT 5;
+--------------+
| name         |
+--------------+
| Priya Sharma  |
| Rahul Verma   |
| Sneha Gupta   |
| Arjun Singh   |
| Deepika Patel |
+--------------+
5 rows in set (0.00 sec)
```

```
mysql> SELECT department, AVG(salary) AS average_salary FROM employees GROUP BY department;
+------------+----------------+
| department | average_salary |
+------------+----------------+
| Sales      |     52500.0000 |
| Marketing  |     61000.0000 |
| Finance    |     70000.0000 |
+------------+----------------+
3 rows in set (0.03 sec)
```

```
mysql> SELECT department, AVG(salary) AS average_salary FROM employees GROUP BY department HAVING
AVG(salary) > 60000;
+------------+----------------+
| department | average_salary |
+------------+----------------+
| Marketing  |     61000.0000 |
| Finance    |     70000.0000 |
+------------+----------------+
2 rows in set (0.02 sec)
```

```
mysql> SELECT e.name, e.department, d.location
    -> FROM employees e
    -> INNER JOIN departments d ON e.department = d.dept_name;
+---------------+-------------+----------+
| name          | department  | location |
+---------------+-------------+----------+
| Priya Sharma  | Sales       | North    |
| Rahul Verma   | Marketing   | West     |
| Sneha Gupta   | Sales       | North    |
| Arjun Singh   | Finance     | South    |
| Deepika Patel | Marketing   | West     |
+---------------+-------------+----------+
5 rows in set (0.02 sec)
```

```
mysql> SELECT e.name, e.department, d.location
    -> FROM employees e
    -> LEFT JOIN departments d ON e.department = d.dept_name;
+---------------+-------------+----------+
| name          | department  | location |
+---------------+-------------+----------+
| Priya Sharma  | Sales       | North    |
| Rahul Verma   | Marketing   | West     |
| Sneha Gupta   | Sales       | North    |
| Arjun Singh   | Finance     | South    |
| Deepika Patel | Marketing   | West     |
+---------------+-------------+----------+
5 rows in set (0.01 sec)

mysql> SELECT e.name, e.department, d.location
    -> FROM employees e
    -> RIGHT JOIN departments d ON e.department = d.dept_name;
+---------------+-------------+----------+
| name          | department  | location |
+---------------+-------------+----------+
| Arjun Singh   | Finance     | South    |
| NULL          | NULL        | Central  |
| NULL          | NULL        | South    |
| Deepika Patel | Marketing   | West     |
| Rahul Verma   | Marketing   | West     |
| Sneha Gupta   | Sales       | North    |
| Priya Sharma  | Sales       | North    |
+---------------+-------------+----------+
7 rows in set (0.02 sec)
```

```
mysql> SELECT name FROM employees WHERE name LIKE 'A%';
+--------------+
| name         |
+--------------+
| Arjun Singh  |
+--------------+
1 row in set (0.01 sec)

mysql> SELECT name FROM employees WHERE name LIKE '%n %';
+--------------+
| name         |
+--------------+
| Arjun Singh  |
+--------------+
1 row in set (0.00 sec)
```

```
mysql> SELECT name, department FROM employees WHERE department IN ('Sales', 'Marketing');
+---------------+------------+
| name          | department |
+---------------+------------+
| Priya Sharma  | Sales      |
| Rahul Verma   | Marketing  |
| Sneha Gupta   | Sales      |
| Deepika Patel | Marketing  |
+---------------+------------+
4 rows in set (0.00 sec)

mysql> SELECT name, department FROM employees WHERE department NOT IN ('Finance', 'IT');
+---------------+------------+
| name          | department |
+---------------+------------+
| Priya Sharma  | Sales      |
| Rahul Verma   | Marketing  |
| Sneha Gupta   | Sales      |
| Deepika Patel | Marketing  |
+---------------+------------+
4 rows in set (0.00 sec)
```

```
mysql> SELECT name, salary FROM employees WHERE salary BETWEEN 55000 AND 70000;
+---------------+--------+
| name          | salary |
+---------------+--------+
| Rahul Verma   |  60000 |
| Sneha Gupta   |  55000 |
| Arjun Singh   |  70000 |
| Deepika Patel |  62000 |
+---------------+--------+
4 rows in set (0.01 sec)
```

```
mysql> SELECT name FROM employees WHERE name IS NOT NULL;
+---------------+
| name          |
+---------------+
| Priya Sharma  |
| Rahul Verma   |
| Sneha Gupta   |
| Arjun Singh   |
| Deepika Patel |
+---------------+
5 rows in set (0.01 sec)
```

```
    -> UNION
    -> SELECT name, department , "Full Time" as status FROM employees WHERE department = 'Sales' ;
+--------------+------------+-----------+
| name         | department | status    |
+--------------+------------+-----------+
| Ram Kumar    | Sales      | Trainee   |
| Priya Sharma | Sales      | Full Time |
| Sneha Gupta  | Sales      | Full Time |
+--------------+------------+-----------+
3 rows in set (0.01 sec)
```