

Assignment 1

CREATEING THE TABLE:

```
CREATE TABLE employees (emp_id INT PRIMARY KEY, name VARCHAR(30), department VARCHAR(30), salary INT, joining_date DATE, city VARCHAR(30));
```

INSERTING THE DATA:

```
INSERT INTO employees (emp_id, name, department, salary, joining_date, city) VALUES
```

```
(1, 'Alice Smith', 'HR', 45000, '2020-02-15', 'New York'),  
(2, 'Bob Johnson', 'IT', 60000, '2019-08-23', 'Chicago'),  
(3, 'Carol White', 'IT', 75000, '2021-01-10', 'New York'),  
(4, 'David Brown', 'Finance', 50000, '2020-06-01', 'San Diego'),  
(5, 'Eva Adams', 'HR', 47000, '2018-04-12', 'Chicago'),  
(6, 'Frank Lee', 'Finance', 65000, '2021-11-05', 'New York'),  
(7, 'Grace Kim', 'IT', 80000, '2017-09-18', 'San Diego'),  
(8, 'Henry Clark', 'Marketing', 55000, '2019-12-29', 'Chicago'),  
(9, 'Irene Scott', 'Marketing', 53000, '2021-03-22', 'New York'),  
(10, 'Jack Davis', 'IT', 72000, '2020-08-14', 'Chicago');
```

QUERIES:

```
mysql> SELECT*FROM employees;  
+-----+-----+-----+-----+-----+-----+  
| emp_id | name       | department | salary | joining_date | city       |  
+-----+-----+-----+-----+-----+-----+  
| 1      | Alice Smith | HR         | 45000  | 2020-02-15   | New York  |  
| 2      | Bob Johnson | IT         | 60000  | 2019-08-23   | Chicago   |  
| 3      | Carol White | IT         | 75000  | 2021-01-10   | New York  |  
| 4      | David Brown | Finance    | 50000  | 2020-06-01   | San Diego |  
| 5      | Eva Adams   | HR         | 47000  | 2018-04-12   | Chicago   |  
| 6      | Frank Lee   | Finance    | 65000  | 2021-11-05   | New York  |  
| 7      | Grace Kim   | IT         | 80000  | 2017-09-18   | San Diego |  
| 8      | Henry Clark | Marketing  | 55000  | 2019-12-29   | Chicago   |  
| 9      | Irene Scott | Marketing  | 53000  | 2021-03-22   | New York  |  
| 10     | Jack Davis  | IT         | 72000  | 2020-08-14   | Chicago   |  
+-----+-----+-----+-----+-----+-----+  
10 rows in set (0.00 sec)
```

1. Show all employees who work in the IT department.

```
mysql> SELECT *FROM employees WHERE department='IT';
```

emp_id	name	department	salary	joining_date	city
2	Bob Johnson	IT	60000	2019-08-23	Chicago
3	Carol White	IT	75000	2021-01-10	New York
7	Grace Kim	IT	80000	2017-09-18	San Diego
10	Jack Davis	IT	72000	2020-08-14	Chicago

```
4 rows in set (0.00 sec)
```

2. Find employees whose salary is greater than 60,000.

```
mysql> SELECT *FROM employees WHERE salary > 60000;
```

emp_id	name	department	salary	joining_date	city
3	Carol White	IT	75000	2021-01-10	New York
6	Frank Lee	Finance	65000	2021-11-05	New York
7	Grace Kim	IT	80000	2017-09-18	San Diego
10	Jack Davis	IT	72000	2020-08-14	Chicago

```
4 rows in set (0.00 sec)
```

3. Get all employees who joined after 1st Jan 2020.

```
mysql> SELECT *FROM employees WHERE joining_date > '2020-01-01';
```

emp_id	name	department	salary	joining_date	city
1	Alice Smith	HR	45000	2020-02-15	New York
3	Carol White	IT	75000	2021-01-10	New York
4	David Brown	Finance	50000	2020-06-01	San Diego
6	Frank Lee	Finance	65000	2021-11-05	New York
9	Irene Scott	Marketing	53000	2021-03-22	New York
10	Jack Davis	IT	72000	2020-08-14	Chicago

```
6 rows in set (0.00 sec)
```

4. Find the total salary paid to employees in each department.

```
mysql> SELECT department, SUM(salary) AS total_salary FROM employees GROUP BY department;
+-----+-----+
| department | total_salary |
+-----+-----+
| HR         | 92000       |
| IT         | 287000      |
| Finance    | 115000      |
| Marketing  | 108000      |
+-----+-----+
4 rows in set (0.00 sec)
```

5. Show the highest paid employee in the Finance department.

```
mysql> SELECT*FROM employees WHERE department = 'Finance' ORDER BY salary DESC LIMIT 1;
+-----+-----+-----+-----+-----+-----+
| emp_id | name      | department | salary | joining_date | city      |
+-----+-----+-----+-----+-----+-----+
| 6      | Frank Lee | Finance    | 65000  | 2021-11-05   | New York |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

6. List employees who are from Chicago and earn more than 55,000.

```
mysql> SELECT*FROM employees WHERE city = 'Chicago' AND salary > 55000;
+-----+-----+-----+-----+-----+-----+
| emp_id | name      | department | salary | joining_date | city      |
+-----+-----+-----+-----+-----+-----+
| 2      | Bob Johnson | IT         | 60000  | 2019-08-23   | Chicago  |
| 10     | Jack Davis  | IT         | 72000  | 2020-08-14   | Chicago  |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

7. Find the number of employees in each city.

```
mysql> SELECT city, COUNT(*) AS employee_count FROM employees GROUP BY city;
+-----+-----+
| city      | employee_count |
+-----+-----+
| New York  | 4              |
| Chicago   | 4              |
| San Diego | 2              |
+-----+-----+
3 rows in set (0.00 sec)
```

8. Show employees in the IT department ordered by salary in descending order

```
mysql> SELECT*FROM employees WHERE department = 'IT' ORDER BY salary DESC;
+-----+-----+-----+-----+-----+-----+
| emp_id | name       | department | salary | joining_date | city       |
+-----+-----+-----+-----+-----+-----+
| 7      | Grace Kim  | IT         | 80000  | 2017-09-18   | San Diego |
| 3      | Carol White | IT         | 75000  | 2021-01-10   | New York  |
| 10     | Jack Davis | IT         | 72000  | 2020-08-14   | Chicago   |
| 2      | Bob Johnson | IT         | 60000  | 2019-08-23   | Chicago   |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

9. Display the average salary of all employees.

```
mysql> SELECT AVG(salary) AS average_salary FROM employees;
+-----+
| average_salary |
+-----+
| 60200.0000    |
+-----+
1 row in set (0.00 sec)
```

10. Get the details of the top 3 highest paid employees

```
mysql> SELECT*FROM employees ORDER BY salary DESC LIMIT 3;
+-----+-----+-----+-----+-----+-----+
| emp_id | name       | department | salary | joining_date | city       |
+-----+-----+-----+-----+-----+-----+
| 7      | Grace Kim  | IT         | 80000  | 2017-09-18   | San Diego |
| 3      | Carol White | IT         | 75000  | 2021-01-10   | New York  |
| 10     | Jack Davis | IT         | 72000  | 2020-08-14   | Chicago   |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```