# Assignment No. 3

- Creating EMPLOYEES table

```
mysql> USE office;
Database changed
mysql> CREATE TABLE EMPLOYEES (
    ->     Employee_Id INT,
    ->     First_Name VARCHAR(50),
    ->     Last_Name VARCHAR(50),
    ->     Email VARCHAR(100),
    ->     Phone_Number VARCHAR(20),
    ->     Hire_Date DATE,
    ->     Job_Id VARCHAR(20),
    ->     Salary DECIMAL(10, 2),
    ->     Commission_Pct DECIMAL(4, 2),
    ->     Manager_Id INT,
    ->     Department_Id INT
    -> );
Query OK, 0 rows affected (0.01 sec)
```

- Inserting Values

```
mysql> INSERT INTO EMPLOYEES (Employee_Id, First_Name, Last_Name, Email, Phone_Number, Hire_Date, Job_Id, Salary, Commission_Pct, Manager_Id, Department_Id)
    -> VALUES
    -> (100, 'John', 'Doe', 'john.doe@example.com', '1234567890', '2010-01-01', 'MANAGER', 6000, 0.1, NULL, 90),
    -> (101, 'Jane', 'Smith', 'jane.smith@example.com', '9876543210', '2015-05-15', 'SALESMAN', 5000, 0.05, 100, 30),
    -> (102, 'Michael', 'Austin', 'michael.austin@example.com', '4567890123', '2012-10-10', 'CLERK', 4000, NULL, 101, 20),
    -> (103, 'Emma', 'Johnson', 'emma.johnson@example.com', '7418529630', '2018-08-20', 'ANALYST', 7000, 0.15, 100, 60),
    -> (104, 'David', 'Williams', 'david.williams@example.com', '3692581470', '2013-12-25', 'SALESMAN', 5500, 0.07, 100, 80),
    -> (105, 'Sarah', 'Brown', 'sarah.brown@example.com', '2581473690', '2017-04-30', 'CLERK', 4500, NULL, 102, 70),
    -> (106, 'Ryan', 'Taylor', 'ryan.taylor@example.com', '1473692580', '2019-10-05', 'MANAGER', 6200, 0.12, NULL, 40),
    -> (107, 'Olivia', 'Miller', 'olivia.miller@example.com', '9638527410', '2016-06-10', 'SALESMAN', 5200, 0.06, 106, 80),
    -> (108, 'James', 'Wilson', 'james.wilson@example.com', '6325874109', '2020-03-15', 'CLERK', 4800, NULL, 106, 30),
    -> (109, 'Sophia', 'Davis', 'sophia.davis@example.com', '1592634870', '2014-09-01', 'ANALYST', 7500, 0.2, 106, 60);
Query OK, 10 rows affected (0.01 sec)
Records: 10  Duplicates: 0  Warnings: 0
```

1. Find out the employee id, names, salaries of all the employees.

Sol.:

```
mysql> SELECT Employee_Id, First_Name, Last_Name, Salary FROM EMPLOYEES;
+-------------+------------+-----------+---------+
| Employee_Id | First_Name | Last_Name | Salary  |
+-------------+------------+-----------+---------+
|         100 | John       | Doe       | 6000.00 |
|         101 | Jane       | Smith     | 5000.00 |
|         102 | Michael    | Austin    | 4000.00 |
|         103 | Emma       | Johnson   | 7000.00 |
|         104 | David      | Williams  | 5500.00 |
|         105 | Sarah      | Brown     | 4500.00 |
|         106 | Ryan       | Taylor    | 6200.00 |
|         107 | Olivia     | Miller    | 5200.00 |
|         108 | James      | Wilson    | 4800.00 |
|         109 | Sophia     | Davis     | 7500.00 |
+-------------+------------+-----------+---------+
10 rows in set (0.00 sec)
```

2. List out the employees who works under manager 100.

Sol.:

```
mysql> SELECT Employee_Id, First_Name, Last_Name FROM EMPLOYEES WHERE Manager_Id = 100;
+-------------+------------+-----------+
| Employee_Id | First_Name | Last_Name |
+-------------+------------+-----------+
|         101 | Jane       | Smith     |
|         103 | Emma       | Johnson   |
|         104 | David      | Williams  |
+-------------+------------+-----------+
3 rows in set (0.00 sec)
```

3. Find the names of the employees who have a salary greater than or equal to 4800.

Sol.:

```
mysql> SELECT First_Name, Last_Name FROM EMPLOYEES WHERE Salary >= 4800;
+------------+-----------+
| First_Name | Last_Name |
+------------+-----------+
| John       | Doe       |
| Jane       | Smith     |
| Emma       | Johnson   |
| David      | Williams  |
| Ryan       | Taylor    |
| Olivia     | Miller    |
| James      | Wilson    |
| Sophia     | Davis     |
+------------+-----------+
8 rows in set (0.00 sec)
```

4. List out the employees whose last name is ‘AUSTIN’.

Sol.:

```
mysql> SELECT * FROM EMPLOYEES WHERE Last_Name = 'Austin';
+-------------+------------+-----------+-------------------------+--------------+------------+--------+---------+----------------+------------+---------------+
| Employee_Id | First_Name | Last_Name | Email                   | Phone_Number | Hire_Date  | Job_Id | Salary  | Commission_Pct | Manager_Id | Department_Id |
+-------------+------------+-----------+-------------------------+--------------+------------+--------+---------+----------------+------------+---------------+
|         102 | Michael    | Austin    | michael.austin@example.com | 4567890123   | 2012-10-10 | CLERK  | 4000.00 |           NULL |        101 |            20 |
+-------------+------------+-----------+-------------------------+--------------+------------+--------+---------+----------------+------------+---------------+
1 row in set (0.00 sec)
```

5. Find the names of the employees who works in departments 60,70 and 80.

Sol.:

```
mysql> SELECT First_Name, Last_Name FROM EMPLOYEES WHERE Department_Id IN (60, 70, 80);
+------------+-----------+
| First_Name | Last_Name |
+------------+-----------+
| Emma       | Johnson   |
| David      | Williams  |
| Sarah      | Brown     |
| Olivia     | Miller    |
| Sophia     | Davis     |
+------------+-----------+
5 rows in set (0.00 sec)
```

6. Display the unique Manager_Id.

Sol.:

```
mysql> SELECT DISTINCT Manager_Id FROM EMPLOYEES;
+------------+
| Manager_Id |
+------------+
|       NULL |
|        100 |
|        101 |
|        102 |
|        106 |
+------------+
5 rows in set (0.00 sec)
```

7. Delete the record of the Employee id 102.

Sol.:

```
mysql> DELETE FROM EMPLOYEES WHERE Employee_Id = 102;
Query OK, 1 row affected (0.00 sec)

mysql> SELECT Employee_Id, First_Name, Last_Name, Salary FROM EMPLOYEES;
+-------------+------------+-----------+---------+
| Employee_Id | First_Name | Last_Name | Salary  |
+-------------+------------+-----------+---------+
|         100 | John       | Doe       | 6000.00 |
|         101 | Jane       | Smith     | 5000.00 |
|         103 | Emma       | Johnson   | 7000.00 |
|         104 | David      | Williams  | 5500.00 |
|         105 | Sarah      | Brown     | 4500.00 |
|         106 | Ryan       | Taylor    | 6200.00 |
|         107 | Olivia     | Miller    | 5200.00 |
|         108 | James      | Wilson    | 4800.00 |
|         109 | Sophia     | Davis     | 7500.00 |
+-------------+------------+-----------+---------+
9 rows in set (0.00 sec)
```

8. Change the salary of the employee “John” to 50000.

Sol.:

```
mysql> UPDATE EMPLOYEES SET Salary = 50000 WHERE First_Name = 'John';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT Employee_Id, First_Name, Last_Name, Salary FROM EMPLOYEES;
+-------------+------------+-----------+----------+
| Employee_Id | First_Name | Last_Name | Salary   |
+-------------+------------+-----------+----------+
|         100 | John       | Doe       | 50000.00 |
|         101 | Jane       | Smith     |  5000.00 |
|         103 | Emma       | Johnson   |  7000.00 |
|         104 | David      | Williams  |  5500.00 |
|         105 | Sarah      | Brown     |  4500.00 |
|         106 | Ryan       | Taylor    |  6200.00 |
|         107 | Olivia     | Miller    |  5200.00 |
|         108 | James      | Wilson    |  4800.00 |
|         109 | Sophia     | Davis     |  7500.00 |
+-------------+------------+-----------+----------+
9 rows in set (0.00 sec)
```

9. List the employees who has joined after 1 st Jan 2010.

Sol.:

```
mysql> SELECT * FROM EMPLOYEES WHERE Hire_Date > '2010-01-01';
+-------------+------------+-----------+-------------------------+--------------+------------+----------+---------+----------------+------------+---------------+
| Employee_Id | First_Name | Last_Name | Email                   | Phone_Number | Hire_Date  | Job_Id   | Salary  | Commission_Pct | Manager_Id | Department_Id |
+-------------+------------+-----------+-------------------------+--------------+------------+----------+---------+----------------+------------+---------------+
|         101 | Jane       | Smith     | jane.smith@example.com  | 9876543210   | 2015-05-15 | SALESMAN | 5000.00 |           0.05 |        100 |            30 |
|         103 | Emma       | Johnson   | emma.johnson@example.com| 7418529630   | 2018-08-20 | ANALYST  | 7000.00 |           0.15 |        100 |            60 |
|         104 | David      | Williams  | david.williams@example.com| 3692581470 | 2013-12-25 | SALESMAN | 5500.00 |           0.07 |        100 |            80 |
|         105 | Sarah      | Brown     | sarah.brown@example.com | 2581473690   | 2017-04-30 | CLERK    | 4500.00 |           NULL |        102 |            70 |
|         106 | Ryan       | Taylor    | ryan.taylor@example.com | 1473692580   | 2019-10-05 | MANAGER  | 6200.00 |           0.12 |       NULL |            40 |
|         107 | Olivia     | Miller    | olivia.miller@example.com| 9638527410  | 2016-06-10 | SALESMAN | 5200.00 |           0.06 |        106 |            80 |
|         108 | James      | Wilson    | james.wilson@example.com| 6325874109   | 2020-03-15 | CLERK    | 4800.00 |           NULL |        106 |            30 |
|         109 | Sophia     | Davis     | sophia.davis@example.com| 1592634870   | 2014-09-01 | ANALYST  | 7500.00 |           0.20 |        106 |            60 |
+-------------+------------+-----------+-------------------------+--------------+------------+----------+---------+----------------+------------+---------------+
8 rows in set (0.00 sec)
```

10. Display the names of the employees whose first name starts with “A”.

Sol.:

```
mysql> SELECT First_Name, Last_Name FROM EMPLOYEES WHERE First_Name LIKE 'A%';
+------------+-----------+
| First_Name | Last_Name |
+------------+-----------+
| Alice      | Johnson   |
+------------+-----------+
1 row in set (0.00 sec)
```