

# SQL TASK-1

## Step 1: Install MySQL

To install MySQL, you can follow the instructions on the MySQL website:

<https://dev.mysql.com/doc/refman/8.0/en/installing.html>

## Step 2: Create a database in MySQL

Once after installing MySQL, we can create a database by running the following command:

CREATE DATABASE (database\_name);

### **Database schema:**

#### **Department:**

id (INT): The primary key of the table.

deptcode (INT): The department code.

deptname (VARCHAR(30)): The department name.

location (VARCHAR(33)): The department location.

#### **Employee:**

id (INT): The primary key of the table.

empcode (INT): The employee code.

empfname (VARCHAR(15)): The employee's first name.

empiname (VARCHAR(15)): The employee's last name.

job (CHAR(4)): The employee's job title.

date (DATE): The employee's hire date.

salary (decimal(6,2)): The employee's salary.

manager (INT): The employee's manager's ID.

hireddate (DATE): The employee's start date.

commission (INT): The employee's commission.

deptcode (INT): The department code.

## INSTERING DATA :

Enter password: \*\*\*\*\*

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 22

Server version: 5.1.45-community MySQL Community Server (GPL)

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> CREATE DATABASE my_database;
```

Query OK, 1 row affected (0.00 sec)

```
mysql> USE my_database;
```

Database changed

```
mysql> CREATE TABLE department (deptcode INT NOT NULL,deptname VARCHAR(30) NOT  
NULL,location VARCHAR(33) NOT NULL,PRIMARY KEY (deptcode));
```

Query OK, 0 rows affected (0.02 sec)

```
mysql> INSERT INTO department (deptcode, deptname, location) VALUES (10, 'FINANCE',  
'EDINBURGH');
```

Query OK, 1 row affected (0.02 sec)

```
mysql> INSERT INTO department (deptcode, deptname, location) VALUES (20, 'SOFTWARE',  
'PADDINGTON');
```

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO department (deptcode, deptname, location) VALUES (30, 'SALES',  
'MAIDSTONE');
```

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO department (deptcode, deptname, location) VALUES (40, 'MARKETING',  
'DARLINGTON');
```

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO department (deptcode, deptname, location) VALUES (50, 'ADMIN', 'BIRMINGHAM');
```

Query OK, 1 row affected (0.00 sec)

```
mysql> CREATE TABLE employee (
```

```
-> empcode INT NOT NULL,  
-> empfname VARCHAR(15) NOT NULL,  
-> empiname VARCHAR(15) NOT NULL,  
-> job CHAR(4) NOT NULL,  
-> manager INT,  
-> hiredate DATE,  
-> salary DECIMAL(6,2),  
-> commission INT,  
-> deptcode INT NOT NULL,  
-> FOREIGN KEY (deptcode) REFERENCES department (deptcode)  
-> );
```

Query OK, 0 rows affected (0.02 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9369, 'TONY', 'STARK', LEFT('SOFTWARE ENGINEER', 4), 7902, '1980-12-17', 2800, 0, 20);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9499, 'TIM', 'ADOLF', LEFT('SALESMAN', 4), 7698, '1981-02-20', 1600, 300, 30);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9566, 'KIM', 'JARVIS', LEFT('MANAGER', 4), 7839, '1981-04-02', 3570, 0, 20);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9591, 'WENDY', 'SHAWN', LEFT('SALESMAN', 4), 7698, '1981-02-22', 500, 0, 30);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9654, 'SAM', 'MILES', LEFT('SALESMAN', 4), 7698, '1981-09-28', 1250, 1400, 30);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9698, 'BELLA', 'SWAN', LEFT('MANAGER', 4), 7839, '1981-05-01', 3420, 0, 30);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9777, 'MADII', 'HIMBURY', LEFT('ANALYST', 4), 7839, '1981-05-01', 2000, 200, 20)
```

-> ;

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9782, 'KEVIN', 'HILL', LEFT('MANAGER', 4), 7839, '1981-06-09', 2940, 0, 10);
```

Query OK, 1 row affected (0.02 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9778, 'CONNIE', 'SMITH', LEFT('ANALYST', 4), 7566, '1982-12-09', 3000, 0, 20);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9839, 'ALFRED', 'KINSLEY', LEFT('PRESIDENT', 4), 7566, '1981-11-17', 5000, 0, 10);
```

Query OK, 1 row affected (0.02 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9844, 'PAUL', 'TIMOTHY', LEFT('SALESMAN', 4), 7698, '1981-08-09', 1500, 0, 30);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9860, 'ATHENA', 'WILSON', LEFT('ANALYST', 4), 7839, '1982-06-21', 7000, 100, 50);
```

Query OK, 1 row affected (0.02 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9861, 'JENNIFER', 'HUETTE', LEFT('ANALYST', 4), 7839, '1976-07-01', 5000, 100, 50);
```

Query OK, 1 row affected (0.02 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9876, 'JOHN', 'ASGHAR', LEFT('SOFTWARE ENGINEER', 4), 7788, '1983-01-12', 3100, 0, 20);
```

Query OK, 1 row affected (0.02 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9900, 'ROSE', 'SUMMERS', LEFT('TECHNICAL LEAD', 4), 7698, '1981-12-03', 2950, 0, 20);
```

Query OK, 1 row affected (0.00 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9902, 'ANDREW', 'FAULIKNER', LEFT('ANALYST', 4), 7566, '1981-12-03', 3000, 0, 10);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> INSERT INTO employee (empcode, empfname, empiname, job, manager, hiredate, salary, commission, deptcode) VALUES (9934, 'KAREN', 'MATTHEWS', LEFT('SOFTWARE ENGINEER', 4), 7782, '1982-01-23', 3300, 0, 20);
```

Query OK, 1 row affected (0.02 sec)

```
mysql> USE my_database;
Database changed
mysql> SELECT * FROM employee;
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| empcode | empfname | empiname | job | manager | hiredate | salary | commission | deptcode |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 9369 | TONY | STARK | SOFT | 7902 | 1980-12-17 | 2800.00 | 0 | 20 |
| 9499 | TIM | ADOLF | SALE | 7698 | 1981-02-20 | 1600.00 | 300 | 30 |
| 9566 | KIM | JARVIS | MANA | 7839 | 1981-04-02 | 3570.00 | 0 | 20 |
| 9591 | WENDY | SHAWN | SALE | 7698 | 1981-02-22 | 500.00 | 0 | 30 |
| 9654 | SAM | MILES | SALE | 7698 | 1981-09-28 | 1250.00 | 1400 | 30 |
| 9698 | BELLA | SWAN | MANA | 7839 | 1981-05-01 | 3420.00 | 0 | 30 |
| 9777 | MADII | HIMBURY | ANAL | 7839 | 1981-05-01 | 2000.00 | 200 | 20 |
| 9782 | KEVIN | HILL | MANA | 7839 | 1981-06-09 | 2940.00 | 0 | 10 |
| 9778 | CONNIE | SMITH | ANAL | 7566 | 1982-12-09 | 3000.00 | 0 | 20 |
| 9839 | ALFRED | KINSLEY | PRES | 7566 | 1981-11-17 | 5000.00 | 0 | 10 |
| 9844 | PAUL | TIMOTHY | SALE | 7698 | 1981-08-09 | 1500.00 | 0 | 30 |
| 9860 | ATHENA | WILSON | ANAL | 7839 | 1982-06-21 | 7000.00 | 100 | 50 |
| 9861 | JENNIFER | HUETTE | ANAL | 7839 | 1976-07-01 | 5000.00 | 100 | 50 |
| 9876 | JOHN | ASGHAR | SOFT | 7788 | 1983-01-12 | 3100.00 | 0 | 20 |
| 9900 | ROSE | SUMMERS | TECH | 7698 | 1981-12-03 | 2950.00 | 0 | 20 |
| 9902 | ANDREW | FAULIKNER | ANAL | 7566 | 1981-12-03 | 3000.00 | 0 | 10 |
| 9934 | KAREN | MATTHEWS | SOFT | 7782 | 1982-01-23 | 3300.00 | 0 | 20 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
17 rows in set (0.00 sec)

mysql> SELECT * FROM department;
+-----+-----+-----+
| deptcode | deptname | location |
+-----+-----+-----+
| 10 | FINANCE | EDINBURGH |
| 20 | SOFTWARE | PADDINGTON |
| 30 | SALES | MAIDSTONE |
| 40 | MARKETING | DARLINGTON |
| 50 | ADMIN | BIRMINGHAM |
+-----+-----+-----+
5 rows in set (0.00 sec)
```