* **Example**

**1. Create table EMP(Eid,ename,sal,commission,jobid,hiredate,did):**

**Query:**

Create table Employees (Employee\_id int(3) not null,first\_name varchar(10),last\_name varchar(10),salary int(8),hire\_date date default '2004-06-13',department\_id int(3));

**Output:**

Query OK, 0 rows affected (0.15 sec)

mysql> desc Employees;

+---------------+-------------+------+-----+------------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------------+-------------+------+-----+------------+-------+

| Employee\_id | int(3) | NO | | NULL | |

| first\_name | varchar(10) | YES | | NULL | |

| last\_name | varchar(10) | YES | | NULL | |

| salary | int(8) | YES | | NULL | |

| hire\_date | date | YES | | 2004-06-13 | |

| department\_id | int(3) | YES | MUL | NULL | |

+---------------+-------------+------+-----+------------+-------+

1. rows in set (0.00 sec)

**2.Create table Departments(Did,dname,Locid):**

**Query:**

Create table Departments (department\_id int(3) primary key,department\_name varchar(10) not null,loaction\_id int(3),unique(department\_name));

**Output:**

Query OK, 0 rows affected (0.15 sec)

mysql> desc Departments;

+-----------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-----------------+-------------+------+-----+---------+-------+

| department\_id | int(3) | NO | PRI | NULL | |

| department\_name | varchar(10) | NO | UNI | NULL | |

| loaction\_id | int(3) | YES | | NULL | |

+-----------------+-------------+------+-----+---------+-------+

3 rows in set (0.11 sec)

**3.Create table Locations(location\_id,location\_name):**

**Query:**

mysql> Create table Locations

-> (location\_id int(3) primary key,location\_name varchar(10));

**Output:**

Query OK, 0 rows affected (0.17 sec)

mysql> desc Locations;

+---------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------------+-------------+------+-----+---------+-------+

| location\_id | int(3) | NO | PRI | NULL | |

| location\_name | varchar(10) | YES | | NULL | |

+---------------+-------------+------+-----+---------+-------+

2 rows in set (0.00 sec)

**4.Add Contraints to the Attributes:**

**Query:**

mysql> Alter table Employees

-> add foreign key(department\_id) references Departments(department\_id);

**Output:**

Query OK, 0 rows affected (0.27 sec)

Records: 0 Duplicates: 0 Warnings: 0

**Query:**

mysql> Alter table Departments add foreign key(loaction\_id) references Locations(location\_id);

Query OK, 0 rows affected (0.33 sec)

Records: 0 Duplicates: 0 Warnings: 0

**5.Insert values to Location table:**

**Query:**

mysql> Insert into Locations

-> values(100,'Pune'),

-> (110,'Mumbai'),

-> (120,'Delhi'),

-> (130,'Banglore'),

-> (140,'Surat'),

-> (150,'Jaipur');

**Output**:

Query OK, 6 rows affected (0.13 sec)

Records: 6 Duplicates: 0 Warnings: 0

**5.Insert values to Departments table:**

**Query:**

mysql> Insert into Departments

-> values(10,'Marketing',120),

-> (20,'Finance',110),

-> (30,'Sales',140),

-> (40,'Managements',110),

-> (50,'Accounts',130),

-> (60,'Transport',120);

**Output:**

Query OK, 6 rows affected, 1 warning (0.08 sec)

Records: 6 Duplicates: 0 Warnings: 1

**5.Insert values to Employees table:**

**Query:**

mysql> Insert into Employees

-> values(1,'Nishant','Kumar',4500,'2009-07-23',10,8734567865);

**Output:**

Query OK, 1 row affected, 1 warning (0.07 sec)

**Query:**

mysql> Insert into Employees

-> values(2,'Milind','Pathak',5600,'2012-01-30',20,7865239865);

**Output:**

Query OK, 1 row affected, 1 warning (0.07 sec)

**Query:**

mysql> Insert into Employees

-> values (3,'Roshan','Patil',3500,'2007-08-16',30,9876234657),

-> (4,'Rahul','Tawade',7000,'2001-03-18',20,7835679835),

-> (5,'Rohal','Kurup',4600,'2009-07-25',50,9856238765);

**Output:**

Query OK, 3 rows affected, 3 warnings (0.07 sec)

Records: 3 Duplicates: 0 Warnings: 3

**Query:**

mysql> Insert into Employees

-> values (6,'Chetan','Pawar',6700,'2011-04-11',60,7865789623),

-> (7,'Ram','shinde',5000,'2003-09-27',10,982356879856),

-> (8,'Rohal','Kurup',6700,'2007-12-30',20,9856784312),

-> (9,'Yogesh','Mahajan',3400,'2008-03-13',40,876454567),

-> (10,'Mahesh','More',6500,'2010-06-19',50,9876436798);

**Output:**

Query OK, 5 rows affected, 4 warnings (0.04 sec)

Records: 5 Duplicates: 0 Warnings: 4

**6.update the table:**

**Query:**

mysql> Update Employees

-> set first\_name = 'Mayur'

-> where employee\_id = 10;

**Output:**

Query OK, 1 row affected (0.07 sec)

Rows matched: 1 Changed: 1 Warnings: 0

**7.Display the records:**

**Query:**

mysql> Select sum(salary)

-> from Employees;

**Output:**

+-------------+

| sum(salary) |

+-------------+

| 53500 |

+-------------+

1 row in set (0.02 sec)

**Query:**

mysql> Select min(salary),max(salary),count(employee\_id)

-> from Employees;

**Output:**

+-------------+-------------+--------------------+

| min(salary) | max(salary) | count(employee\_id) |

+-------------+-------------+--------------------+

| 3400 | 7000 | 10 |

+-------------+-------------+--------------------+

1 row in set (0.00 sec)

**Query:**

mysql> Select employee\_id,first\_name,last\_name,salary

-> from Employees

-> where salary>5000;

**Output:**

+-------------+------------+-----------+--------+

| employee\_id | first\_name | last\_name | salary |

+-------------+------------+-----------+--------+

| 2 | Milind | Pathak | 5600 |

| 4 | Rahul | Tawade | 7000 |

| 6 | Chetan | Pawar | 6700 |

| 8 | Rohal | Kurup | 6700 |

| 10 | Mayur | More | 6500 |

+-------------+------------+-----------+--------+

5 rows in set (0.00 sec)

**Query:**

mysql> Select employee\_id,last\_name,salary,hire\_date

-> from Employees

-> where last\_name like 'P%';

**Output:**

+-------------+-----------+--------+------------+

| employee\_id | last\_name | salary | hire\_date |

+-------------+-----------+--------+------------+

| 6 | Pawar | 6700 | 2011-04-11 |

+-------------+-----------+--------+------------+

1 row in set (0.00 sec)

**Query:**

mysql> Select employee\_id,first\_name,last\_name,salary from Employees order by salary asc;

**Output:**

+-------------+------------+-----------+--------+

| employee\_id | first\_name | last\_name | salary |

+-------------+------------+-----------+--------+

| 9 | Yogesh | Mahajan | 3400 |

| 3 | Roshan | Patil | 3500 |

| 1 | Nishant | Kumar | 4500 |

| 5 | Rohal | Kurup | 4600 |

| 7 | Ram | shinde | 5000 |

| 2 | Milind | Pathak | 5600 |

| 10 | Mayur | More | 6500 |

| 8 | Rohal | Kurup | 6700 |

| 6 | Chetan | Pawar | 6700 |

| 4 | Rahul | Tawade | 7000 |

+-------------+------------+-----------+--------+

10 rows in set (0.00 sec)

**Query:**

mysql> Select employee\_id,first\_name,last\_name,salary from Employees order by salary desc;

**Output:**

+-------------+------------+-----------+--------+

| employee\_id | first\_name | last\_name | salary |

+-------------+------------+-----------+--------+

| 4 | Rahul | Tawade | 7000 |

| 6 | Chetan | Pawar | 6700 |

| 8 | Rohal | Kurup | 6700 |

| 10 | Mayur | More | 6500 |

| 2 | Milind | Pathak | 5600 |

| 7 | Ram | Kurup | 5000 |

| 5 | Rohal | Kurup | 4600 |

| 1 | Nishant | Kumar | 4500 |

| 3 | Roshan | Patil | 3500 |

| 9 | Yogesh | Mahajan | 3400 |

+-------------+------------+-----------+--------+

10 rows in set (0.01 sec)

**Query:**

mysql> Select employee\_id,first\_name "Name",salary from Employees;

**Output:**

+-------------+---------+--------+

| employee\_id | Name | salary |

+-------------+---------+--------+

| 1 | Nishant | 4500 |

| 2 | Milind | 5600 |

| 3 | Roshan | 3500 |

| 4 | Rahul | 7000 |

| 5 | Rohal | 4600 |

| 6 | Chetan | 6700 |

| 7 | Ram | 5000 |

| 8 | Rohal | 6700 |

| 9 | Yogesh | 3400 |

| 10 | Mayur | 6500 |

+-------------+---------+--------+

10 rows in set (0.00 sec)

**Query:**

mysql> Select employee\_id,first\_name,last\_name,avg(salary)

-> from Employees

-> group by department\_id;

**Output:**

+-------------+------------+-----------+-------------+

| employee\_id | first\_name | last\_name | avg(salary) |

+-------------+------------+-----------+-------------+

| 1 | Nishant | Kumar | 4750.0000 |

| 2 | Milind | Pathak | 6433.3333 |

| 3 | Roshan | Patil | 3500.0000 |

| 9 | Yogesh | Mahajan | 3400.0000 |

| 5 | Rohal | Kurup | 5550.0000 |

| 6 | Chetan | Pawar | 6700.0000 |

+-------------+------------+-----------+-------------+

6 rows in set (0.27 sec)

**Query:**

mysql> Select employee\_id,first\_name,last\_name,min(salary) from Employees group by department\_id;

**Output:**

+-------------+------------+-----------+-------------+

| employee\_id | first\_name | last\_name | min(salary) |

+-------------+------------+-----------+-------------+

| 1 | Nishant | Kumar | 4500 |

| 2 | Milind | Pathak | 5600 |

| 3 | Roshan | Patil | 3500 |

| 9 | Yogesh | Mahajan | 3400 |

| 5 | Rohal | Kurup | 4600 |

| 6 | Chetan | Pawar | 6700 |

+-------------+------------+-----------+-------------+

6 rows in set (0.03 sec)