

```
mysql> create database dbms;  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> use dbms;  
Database changed
```

```
mysql> create table department(  
    -> Dno int PRIMARY KEY,  
    -> Dname varchar(50),  
    -> Location varchar(50) DEFAULT 'NEW DELHI');  
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> create table employee(  
    -> Eno char(3),  
    -> Ename varchar(50) NOT NULL,  
    -> Job_type varchar(50) NOT NULL,  
    -> Manager char(3) DEFAULT NULL,  
    -> Hire_date date NOT NULL,  
    -> Dno int DEFAULT NULL,  
    -> Commission decimal(10,2) DEFAULT NULL,  
    -> Salary decimal(7,2) NOT NULL,  
    -> PRIMARY KEY(Eno),  
    -> CONSTRAINT Dno FOREIGN KEY (Dno) REFERENCES department(Dno),  
    -> CONSTRAINT Manager FOREIGN KEY (Manager) REFERENCES employee(Eno)  
    -> );  
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> desc department;  
+-----+-----+-----+-----+-----+-----+  
| Field | Type      | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| Dno   | int       | NO   | PRI | NULL    |       |  
| Dname | varchar(50) | YES  |     | NULL    |       |  
| Location | varchar(50) | YES  |     | NEW DELHI |       |  
+-----+-----+-----+-----+-----+-----+  
3 rows in set (0.00 sec)
```

```
mysql> desc employee;  
+-----+-----+-----+-----+-----+-----+  
| Field      | Type          | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| Eno        | char(3)       | NO   | PRI | NULL    |       |  
| Ename      | varchar(50)   | NO   |     | NULL    |       |  
| Job_type   | varchar(50)   | NO   |     | NULL    |       |  
| Manager    | char(3)       | YES  | MUL | NULL    |       |  
| Hire_date  | date          | NO   |     | NULL    |       |  
| Dno        | int           | YES  | MUL | NULL    |       |  
| Commission | decimal(10,2) | YES  |     | NULL    |       |  
| Salary     | decimal(7,2)  | NO   |     | NULL    |       |  
+-----+-----+-----+-----+-----+-----+  
8 rows in set (0.00 sec)
```

```
mysql> insert into department values
-> (1,'Data Analyst','Haryana'),
-> (2,'Technical Engineer','Chandigarh'),
-> (3,'Web Developer','New Delhi')
-> ;
```

Query OK, 3 rows affected (0.00 sec)

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> insert into employee values
-> ('1','Komal','Code Developer','1','2022-10-09',1,100.00,40000.00),
-> ('2','Prem','Web Developer','2','2022-10-10',2,000.00,60000.00),
-> ('3','Sahej','App developer','3','2022-10-12',2,000.00,20000.00),
-> ('4','Shivam','Code Developer','4','2022-10-02',3,000.00,60000.00),
-> ('5','Aatika','Data Analyst','5','2022-11-02',1,000.00,50000.00),
-> ('6','Kishan','Code Developer','6','2022-09-05',1,500.00,60000.00),
-> ('7','Adarsh','Data Analyst','7','2022-10-01',3,800.00,50000.00);
```

Query OK, 7 rows affected (0.00 sec)

Records: 7 Duplicates: 0 Warnings: 0

```
mysql> select Ename,Job_type,Hire_date,Eno from employee;
```

Ename	Job_type	Hire_date	Eno
Komal	Code Developer	2022-10-09	1
Prem	Web Developer	2022-10-10	2
Sahej	App developer	2022-10-12	3
Shivam	Code Developer	2022-10-02	4
Aatika	Data Analyst	2022-11-02	5
Kishan	Code Developer	2022-09-05	6
Adarsh	Data Analyst	2022-10-01	7

7 rows in set (0.00 sec)

```
mysql> select distinct Job_type from employee;
```

Job_type
Code Developer
Web Developer
App developer
Data Analyst

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

```
mysql> select concat(Ename,',',Job_type) as Jobs2 from employee;
```

Jobs2
Komal,Code Developer
Prem,Web Developer
Sahej,App developer
Shivam,Code Developer
Aatika,Data Analyst
Kishan,Code Developer
Adarsh,Data Analyst

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

```
mysql> select concat_ws(',',Eno,Ename,Job_type,Manager,Hire_date,Dno,Commission,Salary) as THE_OUTPUT from employee;
```

THE_OUTPUT
1,Komal,Code Developer,1,2022-10-09,1,100.00,40000.00
2,Prem,Web Developer,2,2022-10-10,2,0.00,60000.00
3,Sahej,App developer,3,2022-10-12,2,0.00,20000.00
4,Shivam,Code Developer,4,2022-10-02,3,0.00,60000.00
5,Aatika,Data Analyst,5,2022-11-02,1,0.00,50000.00
6,Kishan,Code Developer,6,2022-09-05,1,500.00,60000.00
7,Adarsh,Data Analyst,7,2022-10-01,3,800.00,50000.00

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