```
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> show databases;
 Database
 bank
  colleg
 hospital
  information_schema
  insurance
  insurance_dhiksha
 mysql
  newdatabase
  office
  performance_schema
  product
  project1
  project2
  salesman_01
  student
  sys
16 rows in set (0.00 sec)
mysql> create database project5;
Query OK, 1 row affected (0.01 sec)
mysql> use project5;
Database changed
```

```
mysql> create table dept(deptno decimal primary key,
    -> dname varchar(20) default NULL,
    -> loc varchar(13) default NULL);
Query OK, 0 rows affected (0.07 sec)
mysql> DESC DEPT;
                         | Null | Key | Default | Extra
  Field | Type
  deptno | decimal(10,0) | NO
                                  PRI | NULL
          varchar(20)
                          YES
                                        NULL
          varchar(13)
                         | YES
  loc
                                        NULL
 rows in set (0.00 sec)
mysql> create table emp(empno decimal(4,0) primary key,
    -> ename varchar(10) default NULL,
    -> mgr_no decimal(4,0) default NULL,
    -> hiredate date default NULL,
    -> sal decimal(7,2) default NULL,
    -> deptno decimal(2,0) references dept(deptno) ON DELETE CASCADE ON UPDATE CASCADE);
Query OK, 0 rows affected (0.03 sec)
mysql> DESC EMP;
                            Null | Key | Default | Extra |
  Field
            Type
             decimal(4,0) | NO
                                   PRI |
                                        NULL
  empno
             varchar(10)
                           YES
  ename
                                         NULL
             decimal(4,0)
                           YES
                                         NULL
  mgr_no
  hiredate
                            YES
            date
                                         NULL
  sal
            decimal(7,2)
                           YES
                                         NULL
  deptno
            decimal(2,0) | YES
                                         NULL
6 rows in set (0.00 sec)
mysql> create table INCENTIVES( empno decimal(4,0) references empno(empno) ON DELETE CASCADE ON UPDATE
CASCADE,
    -> incentive_date date,
    -> incentive_amount decimal(10,2),
    -> primary key (empno, incentive_date));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your My
SQL server version for the right syntax to use near 'UPDATECASCADE,
incentive_date date,
incentive_amount decimal(10,2),
primary key ' at line 1
mysql> create table INCENTIVES( empno decimal(4,0) references empno(empno) ON DELETE CASCADE ON UPDATE
 CASCADE,
    -> incentive_date date,
    -> incentive_amount decimal(10,2),
    -> primary key (empno, incentive_date));
```

```
Query OK, 0 rows affected (0.02 sec)
mysql> DESC INCENTIVES;
  Field
                    Type
                                     Null | Key | Default | Extra
                    decimal(4,0)
                                            PRI | NULL
  empno
  incentive_date
                                     NO
                                            PRI | NULL
                     date
  incentive_amount | decimal(10,2) | YES
                                                 NULL
3 rows in set (0.00 sec)
mysql> CREATE TABLE project(
    -> pno int primary key,
   -> pname varchar(30) NOT NULL,
   -> ploc varchar(30));
Query OK, 0 rows affected (0.02 sec)
mysql> desc projec;
ERROR 1146 (42S02): Table 'project5.projec' doesn't exist
mysql> desc project;
 Field | Type
                       Null | Key | Default | Extra
          int
                        NO
                               PRI I
                                    NULL
  pno
         | varchar(30) | NO
  pname
                                     NULL
         varchar(30) | YES
                                     NULL
3 rows in set (0.00 sec)
mysql> CREATE TABLE assigned_to(
    -> empno decimal(4,0) references emp(empno) ON DELETE CASCADE ON UPDATE CASCADE,
   -> pno int references project(pno) ON DELETE CASCADE ON UPDATE CASCADE,
    -> job_role varchar(30),
    -> primary key(empno, pno));
Query OK, 0 rows affected (0.02 sec)
mysql> DESC ASSIGNED_TO;
  Field
            Type
                           | Null | Key | Default | Extra
            decimal(4,0) | NO
                                  PRI | NULL
  empno
                                   PRI | NULL
  pno
            int
                            NO
  job_role | varchar(30)
                          YES
                                         NULL
3 rows in set (0.00 sec)
mysql> SHOW TABLES;
```

```
assigned_to
  dept
  emp
  incentives
  project
5 rows in set (0.00 sec)
mysql> INSERT INTO dept VALUES(10, "ACCOUNTING", 'MUMBAI');
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO dept VALUES(20, "RESEARCH", 'BENGALURU');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO dept VALUES(30,'SALES','DELHI');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO dept VALUES(40, 'OPERATIONS', 'CHENNAI');
Query OK, 1 row affected (0.00 sec)
mysql> SELECT * FROM dept;
 deptno dname
                      loc
      10 | ACCOUNTING | MUMBAI
      20 | RESEARCH
                       BENGALURU
      30 | SALES
                       DELHI
      40 | OPERATIONS | CHENNAI
4 rows in set (0.00 sec)
mysql> INSERT INTO emp VALUES(7369, 'Adarsh',7902,'2012-12-17','80000.00','20');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO emp VALUES(7499, 'Shruthi',7698,'2013-02-20','16000.00','30'),(7521,'Anvitha',7698,
'2015-02-22','12500.00','30'),(7566,'Tanvir',7839,'2008-04-02','29750.00','20');
Query OK, 3 rows affected (0.00 sec)
Records: 3 Duplicates: 0 Warnings: 0
```

Tables_in_project5

```
mysql> INSERT INTO emp VALUES('7900','JAMES',7698,'2017-12-03','9500.00','30'),('7902','FORD','7566','
2010-12-03','30000.00','20');
Query OK, 2 rows affected (0.00 sec)
Records: 2 Duplicates: 0 Warnings: 0
mysql> SELECT * FROM emp VALUES;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your My
SQL server version for the right syntax to use near 'VALUES' at line 1
mvsql> SELECT * FROM emp:
 empno | ename | mgr_no | hiredate
                                       sal
                                                  deptno
                     7902 | 2012-12-17 | 80000.00
  7369 | Adarsh
                                                        20
  7499
         Shruthi
                     7698
                            2013-02-20 | 16000.00
                                                        30
        Anvitha
                            2015-02-22 | 12500.00
                                                        30
  7521
                     7698
  7566
        Tanvir
                     7839
                            2008-04-02 | 29750.00
                                                        20
  7598
                     7839
                            2015-05-01 | 28500.00
                                                        30
         Kumar
  7654
                            2014-09-28 | 12500.00
                                                        30
         Ramesh
                     7698
        CLARK
                                                        10
  7782
                     7839
                            2017-06-09 24500.00
        SCOTT
                           2010-12-09 | 30000.00
                                                        20
  7788
                     7566
                           2009-11-17 | 99999.99
  7839
        KING
                     NULL
                                                        10
   7844
        TURNER
                           2010-09-08 | 15000.00
                                                        30
                     7698
        ADAMS
                                                        30
   7876
                     7788
                           2013-01-12 | 11000.00
   7900
        JAMES
                     7698
                           2017-12-03
                                         9500.00
                                                        30
  7902 | FORD
                     7566 | 2010-12-03 | 30000.00
                                                        20
13 rows in set (0.00 sec)
mysql> INSERT INTO incentives VALUES(7499,'2019-02-01',5000.00);
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO incentives VALUES(7521, '2019-03-01', 2500.00);
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO incentives VALUES(7566, '2022-02-01', 5070.00);
Ouery OK, 1 row affected (0.01 sec)
mysql> INSERT INTO incentives VALUES(7654,'2020-02-01',2000.00);
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO incentives VALUES(7654, '2022-04-01', 879.00);
```

mysql> INSERT INTO incentives VALUES(7521, '2019-02-01', 8000.00);

mysql> INSERT INTO incentives VALUES(7698, '2019-03-01', 500.00);

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

Query OK, 1 row affected (0.00 sec)

```
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO incentives VALUES(7698, '2022-04-01', 4500.00);
Query OK, 1 row affected (0.00 sec)
mysql> SELECT * FROM incentive;
ERROR 1146 (42S02): Table 'project5.incentive' doesn't exist
mysql> SELECT * FROM incentives;
 empno | incentive_date | incentive_amount
   7499 | 2019-02-01
                                    5000.00
   7521 | 2019-02-01
                                   8000.00
  7521 | 2019-03-01
                                   2500.00
   7566 | 2022-02-01
                                   5070.00
   7654
         2020-02-01
                                   2000.00
   7654
         2022-04-01
                                    879.00
  7698
         2019-03-01
                                    500.00
   7698 | 2020-03-01
                                   9000.00
   7698 | 2022-04-01
                                   4500.00
9 rows in set (0.00 sec)
mysql> INSERT INTO project VALUES(101, 'AI Project', 'BENGALURU');
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO project VALUES(102, 'IOT', 'HYDERABAD');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO project VALUES(103, 'BLOCKCHAIN', 'BENGALURU');
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO project VALUES(104, 'DATA SCIENCE', 'MYSORE');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO project VALUES(105, 'AUTONOMOUS SYSTEMS', 'PUNE');
Query OK, 1 row affected (0.00 sec)
mysql> SELECT * FROM project;
 pno pname
                            ploc
 101 | AI Project
                             BENGALURU
 102 | IOT
                            HYDERABAD
 103 | BLOCKCHAIN
                            BENGALURU
  104 DATA SCIENCE
                            MYSORE
  105 | AUTONOMOUS SYSTEMS | PUNE
5 rows in set (0.00 sec)
```

mysql> INSERT INTO incentives VALUES(7698,'2020-03-01',9000.00);

```
mysql> INSERT INTO assigned_to VALUES(7499,101,'Software Engineer');
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO assigned_to VALUES(7521,101,'Software Architect');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO assigned_to VALUES(7566,101,'Project Manager');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO assigned_to VALUES(7564,102,'Sales');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO assigned_to VALUES(7521,102,'Software Engineer');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO assigned_to VALUES(7499,102,'Software Engineer');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO assigned_to VALUES(7654,103,'Cyber Security');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO assigned_to VALUES(7698,104, 'Software Engineer');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO assigned_to VALUES(7900,105,'Software Engineer');
Query OK, 1 row affected (0.00 sec)
mysql> INSERT INTO assigned_to VALUES(7654,103,'General Manager');
ERROR 1062 (23000): Duplicate entry '7654-103' for key 'assigned_to.PRIMARY'
mysql> INSERT INTO assigned_to VALUES(7839,104, 'General Manager');
Query OK, 1 row affected (0.00 sec)
mysql> SELECT * FROM project;
 pno | pname
                            ploc
 101 | AI Project
                             BENGALURU
 102 | IOT
                            HYDERABAD
 103 | BLOCKCHAIN
                            BENGALURU
  104 | DATA SCIENCE
                            MYSORE
  105 | AUTONOMOUS SYSTEMS | PUNE
5 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM assigned_to;
  empno | pno | job_role
   7499
         101
                Software Engineer
         102
                Software Engineer
   7499
   7521
          101
                Software Architect
   7521
          102
               Software Engineer
   7564
         102 l
               Sales
   7566
          101
                Project Manager
   7654
          103
                Cyber Security
                Software Engineer
   7698
         104
                General Manager
   7839
          104 I
   7900
         105 | Software Engineer
10 rows in set (0.00 sec)
mysql> SELECT e.empno
    -> FROM emp e, assigned_to a, project p
    -> WHERE e.empno=a.empno AND a.pno= p.pno AND p.ploc IN ('BENGALURU', 'HYDERABAD', 'MYSURU');
  empno
   7499
   7499
   7521
   7521
   7566
   7654
```

6 rows in set (0.00 sec)

```
mysql> SELECT e.empno FROM emp e, incentives i
   -> WHERE e.empno=i.empno AND e.empno NOT IN (SELECT empno FROM incentives);
Empty set (0.00 sec)
mysql> SELECT e.empno FROM emp e, incentives i
   -> WHERE e.empno=i.empno AND e.empno NOT IN (SELECT empno FROM incentives);
Empty set (0.00 sec)
mysql> SELECT e.empno FROM emp e
   -> WHERE e.empno NOT IN (SELECT empno FROM incentives);
 empno
  7369
  7598
  7782
  7788
  7839
  7844
  7876
  7900
  7902
9 rows in set (0.00 sec)
mysql> SELECT e.empno, e.name, d.dname, d.loc, a.job_role, p.ploc
   -> FROM emp e, dept d, assigned_to a, project p
   -> WHERE e.deptno=d.deptno AND e.empno=a.empno AND a.pno=p.pno AND d.loc = p.ploc;
ERROR 1054 (42S22): Unknown column 'e.name' in 'field list'
mysql> SELECT e.empno, e.ename, d.dname, d.loc, a.job_role, p.ploc
   -> FROM emp e, dept d, assigned_to a, project p
   -> WHERE e.deptno=d.deptno AND e.empno=a.empno AND a.pno=p.pno AND d.loc = p.ploc;
                                       | job_role
 empno ename dname
                           loc
                                                         ploc
  7566 | Tanvir | RESEARCH | BENGALURU | Project Manager | BENGALURU
1 row in set (0.00 sec)
```

mysql> UPDATE emp SET sal=1.05*sal;

```
mysql> SELECT e.ename FROM emp e WHERE e.ename="A%";
Empty set (0.00 sec)
mysql> SELECT e.ename FROM emp e WHERE e.ename LIKE "A%";
  ename
  Adarsh
  Anvitha
  ADAMS
3 rows in set (0.00 sec)
mysql>
```