```
Last login: Tue Mar 12 10:10:10 on ttys005
macbook@Kshitijs-MacBook-Air ~ % mysql -u root
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 15
Server version: 8.3.0 Homebrew

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owners.

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

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sys                |
| world              |
+--------------------+
5 rows in set (0.02 sec)

mysql> create database impact;
Query OK, 1 row affected (0.01 sec)

mysql> show database;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'database' at line 1
mysql> show databases;;
+--------------------+
| Database           |
+--------------------+
| impact             |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
| world              |
+--------------------+
6 rows in set (0.01 sec)

ERROR:
No query specified

mysql> use impact;
Database changed
mysql> select database();
+------------+
| database() |
+------------+
| impact     |
+------------+
1 row in set (0.00 sec)

mysql> select current_time;
+--------------+
| current_time |
+--------------+
| 10:12:32     |
+--------------+
1 row in set (0.00 sec)

mysql> select current_date();
+----------------+
| current_date() |
+----------------+
| 2024-03-12     |
+----------------+
1 row in set (0.00 sec)

mysql> create table emp
    -> (emp_no int,
    -> emp_name varchar(20),
    -> sal decimal(10,2),
    -> hiredate date,
    -> job varchar(10));
Query OK, 0 rows affected (0.04 sec)

mysql> /
    -> *
    -> /*
   /*> to clear screen use /! clear
   /*> */
    -> ;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '/
*
/*
to clear screen use /! clear
*/' at line 1
mysql> desc emp;
+----------+---------------+------+-----+---------+-------+
| Field    | Type          | Null | Key | Default | Extra |
+----------+---------------+------+-----+---------+-------+
| emp_no   | int           | YES  |     | NULL    |       |
| emp_name | varchar(20)   | YES  |     | NULL    |       |
| sal      | decimal(10,2) | YES  |     | NULL    |       |
| hiredate | date          | YES  |     | NULL    |       |
| job      | varchar(10)   | YES  |     | NULL    |       |
+----------+---------------+------+-----+---------+-------+
5 rows in set (0.04 sec)

mysql> describe emp; #To show table structure
+----------+---------------+------+-----+---------+-------+
| Field    | Type          | Null | Key | Default | Extra |
+----------+---------------+------+-----+---------+-------+
| emp_no   | int           | YES  |     | NULL    |       |
| emp_name | varchar(20)   | YES  |     | NULL    |       |
| sal      | decimal(10,2) | YES  |     | NULL    |       |
| hiredate | date          | YES  |     | NULL    |       |
| job      | varchar(10)   | YES  |     | NULL    |       |
+----------+---------------+------+-----+---------+-------+
5 rows in set (0.00 sec)

mysql> insert into emp values(1001,'martin',4000,'2021-03-12','hr'); #To insert into the table
Query OK, 1 row affected (0.02 sec)

mysql> insert into emp values(1002,'smith',2000,'2022-05-20','operation');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(1003,'allen',3000,'1998-07-10','research');
```

```
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(1004,'ford',4000,'1987-05-01','seniorDEV');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(1005,'king',5000,'1989-04-01','president');
Query OK, 1 row affected (0.00 sec)

mysql> select * from emp;
+--------+----------+---------+------------+-----------+
| emp_no | emp_name | sal     | hiredate   | job       |
+--------+----------+---------+------------+-----------+
|   1001 | martin   | 4000.00 | 2021-03-12 | hr        |
|   1002 | smith    | 2000.00 | 2022-05-20 | operation |
|   1003 | allen    | 3000.00 | 1998-07-10 | research  |
|   1004 | ford     | 4000.00 | 1987-05-01 | seniorDEV |
|   1005 | king     | 5000.00 | 1989-04-01 | president |
+--------+----------+---------+------------+-----------+
5 rows in set (0.00 sec)

mysql> alter table emp add mobile_no int(10);    #using alter we are adding a new column
Query OK, 0 rows affected, 1 warning (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 1

mysql>
Display all 760 possibilities? (y or n)
mysql>
Display all 760 possibilities? (y or n)
mysql> desc emp;
+-----------+---------------+------+-----+---------+-------+
| Field     | Type          | Null | Key | Default | Extra |
+-----------+---------------+------+-----+---------+-------+
| emp_no    | int           | YES  |     | NULL    |       |
| emp_name  | varchar(20)   | YES  |     | NULL    |       |
| sal       | decimal(10,2) | YES  |     | NULL    |       |
| hiredate  | date          | YES  |     | NULL    |       |
| job       | varchar(10)   | YES  |     | NULL    |       |
| mobile_no | int           | YES  |     | NULL    |       |
+-----------+---------------+------+-----+---------+-------+
6 rows in set (0.01 sec)

mysql> alter table emp add (address varchar(20),deptno int);
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> select * from emp;
+--------+----------+---------+------------+-----------+-----------+---------+--------+
| emp_no | emp_name | sal     | hiredate   | job       | mobile_no | address | deptno |
+--------+----------+---------+------------+-----------+-----------+---------+--------+
|   1001 | martin   | 4000.00 | 2021-03-12 | hr        |      NULL | NULL    |   NULL |
|   1002 | smith    | 2000.00 | 2022-05-20 | operation |      NULL | NULL    |   NULL |
|   1003 | allen    | 3000.00 | 1998-07-10 | research  |      NULL | NULL    |   NULL |
|   1004 | ford     | 4000.00 | 1987-05-01 | seniorDEV |      NULL | NULL    |   NULL |
|   1005 | king     | 5000.00 | 1989-04-01 | president |      NULL | NULL    |   NULL |
+--------+----------+---------+------------+-----------+-----------+---------+--------+
5 rows in set (0.00 sec)

mysql> alter table emp modify job varchar(20);                         #using alter we are modifing a column
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc emp;
+-----------+---------------+------+-----+---------+-------+
| Field     | Type          | Null | Key | Default | Extra |
+-----------+---------------+------+-----+---------+-------+
| emp_no    | int           | YES  |     | NULL    |       |
| emp_name  | varchar(20)   | YES  |     | NULL    |       |
| sal       | decimal(10,2) | YES  |     | NULL    |       |
| hiredate  | date          | YES  |     | NULL    |       |
| job       | varchar(20)   | YES  |     | NULL    |       |
| mobile_no | int           | YES  |     | NULL    |       |
| address   | varchar(20)   | YES  |     | NULL    |       |
| deptno    | int           | YES  |     | NULL    |       |
+-----------+---------------+------+-----+---------+-------+
8 rows in set (0.00 sec)

mysql> alter table emp modify address int;
Query OK, 5 rows affected (0.02 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> desc emp;
+-----------+---------------+------+-----+---------+-------+
| Field     | Type          | Null | Key | Default | Extra |
+-----------+---------------+------+-----+---------+-------+
| emp_no    | int           | YES  |     | NULL    |       |
| emp_name  | varchar(20)   | YES  |     | NULL    |       |
| sal       | decimal(10,2) | YES  |     | NULL    |       |
| hiredate  | date          | YES  |     | NULL    |       |
| job       | varchar(20)   | YES  |     | NULL    |       |
| mobile_no | int           | YES  |     | NULL    |       |
| address   | int           | YES  |     | NULL    |       |
| deptno    | int           | YES  |     | NULL    |       |
+-----------+---------------+------+-----+---------+-------+
8 rows in set (0.00 sec)

mysql> alter table emp rename job to designation;                       #using alter we are renaming a column
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'to designation
                #using alter we are renaming a column' at line 1
mysql> alter table emp rename column job to designation;                         #using alter we are renaming a column
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc emp;
+-------------+---------------+------+-----+---------+-------+
| Field       | Type          | Null | Key | Default | Extra |
+-------------+---------------+------+-----+---------+-------+
| emp_no      | int           | YES  |     | NULL    |       |
| emp_name    | varchar(20)   | YES  |     | NULL    |       |
| sal         | decimal(10,2) | YES  |     | NULL    |       |
| hiredate    | date          | YES  |     | NULL    |       |
| designation | varchar(20)   | YES  |     | NULL    |       |
| mobile_no   | int           | YES  |     | NULL    |       |
| address     | int           | YES  |     | NULL    |       |
| deptno      | int           | YES  |     | NULL    |       |
+-------------+---------------+------+-----+---------+-------+
8 rows in set (0.00 sec)

mysql> alter table emp drop column address;                            #using alter we are droping a column
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc emp;
+-------------+---------------+------+-----+---------+-------+
```

```
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| emp_no      | int          | YES  |     | NULL    |       |
| emp_name    | varchar(20)  | YES  |     | NULL    |       |
| sal         | decimal(10,2)| YES  |     | NULL    |       |
| hiredate    | date         | YES  |     | NULL    |       |
| designation | varchar(20)  | YES  |     | NULL    |       |
| mobile_no   | int          | YES  |     | NULL    |       |
| deptno      | int          | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
7 rows in set (0.00 sec)

mysql> alter table emp add primary key(emp_no);                         #using alter add we can assign a column to be primary key
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> desc emp;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| emp_no      | int          | NO   | PRI | NULL    |       |
| emp_name    | varchar(20)  | YES  |     | NULL    |       |
| sal         | decimal(10,2)| YES  |     | NULL    |       |
| hiredate    | date         | YES  |     | NULL    |       |
| designation | varchar(20)  | YES  |     | NULL    |       |
| mobile_no   | int          | YES  |     | NULL    |       |
| deptno      | int          | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
7 rows in set (0.00 sec)

mysql> rename table emp to employee;                                    #using rename we can change table name
Query OK, 0 rows affected (0.01 sec)

mysql> show tables;
+------------------+
| Tables_in_impact |
+------------------+
| employee         |
+------------------+
1 row in set (0.00 sec)

mysql> select * from employee;
+--------+----------+---------+------------+-------------+-----------+--------+
| emp_no | emp_name | sal     | hiredate   | designation | mobile_no | deptno |
+--------+----------+---------+------------+-------------+-----------+--------+
|   1001 | martin   | 4000.00 | 2021-03-12 | hr          |      NULL |   NULL |
|   1002 | smith    | 2000.00 | 2022-05-20 | operation   |      NULL |   NULL |
|   1003 | allen    | 3000.00 | 1998-07-10 | research    |      NULL |   NULL |
|   1004 | ford     | 4000.00 | 1987-05-01 | seniorDEV   |      NULL |   NULL |
|   1005 | king     | 5000.00 | 1989-04-01 | president   |      NULL |   NULL |
+--------+----------+---------+------------+-------------+-----------+--------+
5 rows in set (0.00 sec)

mysql> truncate table employee;                                        #using truncate we can remove all the data from the table
Query OK, 0 rows affected (0.02 sec)

mysql> select * from employee;
Empty set (0.00 sec)

mysql> desc employee;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| emp_no      | int          | NO   | PRI | NULL    |       |
| emp_name    | varchar(20)  | YES  |     | NULL    |       |
| sal         | decimal(10,2)| YES  |     | NULL    |       |
| hiredate    | date         | YES  |     | NULL    |       |
| designation | varchar(20)  | YES  |     | NULL    |       |
| mobile_no   | int          | YES  |     | NULL    |       |
| deptno      | int          | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
7 rows in set (0.01 sec)

mysql> drop table employee;                                            #using drop we can drop the structure of the table...
Query OK, 0 rows affected (0.01 sec)

mysql> desc employee;
ERROR 1146 (42S02): Table 'impact.employee' doesn't exist
mysql> create table emp (emp_no int, emp_name varchar(20), sal decimal(10,2), hiredate date, job varchar(10));
Query OK, 0 rows affected (0.01 sec)

mysql> insert into emp(emp_no,emp_name,sal) values(1001,'smith',4000);
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp(emp_no,emp_name,sal) values(1002,'martin',5000);
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp(emp_no,emp_name,sal) values(1003,'allen',2000);
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp(emp_no,emp_name,sal) values(1004,'ford',2500);
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp(emp_no,emp_name,sal) values(1004,'king',3000);
Query OK, 1 row affected (0.00 sec)

mysql> select * from emp;
+--------+----------+---------+----------+------+
| emp_no | emp_name | sal     | hiredate | job  |
+--------+----------+---------+----------+------+
|   1001 | smith    | 4000.00 | NULL     | NULL |
|   1002 | martin   | 5000.00 | NULL     | NULL |
|   1003 | allen    | 2000.00 | NULL     | NULL |
|   1004 | ford     | 2500.00 | NULL     | NULL |
|   1004 | king     | 3000.00 | NULL     | NULL |
+--------+----------+---------+----------+------+
5 rows in set (0.00 sec)

mysql> truncate table emo;
ERROR 1146 (42S02): Table 'impact.emo' doesn't exist
mysql> truncate table emp;
Query OK, 0 rows affected (0.02 sec)

mysql> insert into emp(emp_no,emp_name,sal) values(1001,'smith',4000);
Query OK, 1 row affected (0.01 sec)

mysql> insert into emp
    -> values(1002,'martin',4000,'2022-05-12,'hr'),
    '> ;
    '> '
    -> ;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'hr'),
;
```

```
'' at line 2
mysql> insert into emp
    -> values(1002,'martin',4000,'2022-05-12','hr'),                                                    -> (1003,'allen'
,3000,'1998-07-10','operation');
Query OK, 2 rows affected (0.00 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> /*
   /*> Coping script to mysql shell
   /*> */
    ->
    -> ;
Query OK, 0 rows affected (0.00 sec)

mysql> DROP TABLE IF EXISTS emp;
Query OK, 0 rows affected (0.03 sec)

mysql>
mysql> CREATE TABLE emp (
    ->    empno decimal(4,0) NOT NULL,
    ->    ename varchar(10) default NULL,
    ->    job varchar(9) default NULL,
    ->    mgr decimal(4,0) default NULL,
    ->    hiredate date default NULL,
    ->    sal decimal(7,2) default NULL,
    ->    comm decimal(7,2) default NULL,
    ->    deptno decimal(2,0) default NULL
    -> );
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> DROP TABLE IF EXISTS dept;
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql>
mysql> CREATE TABLE dept (
    ->    deptno decimal(2,0) default NULL,
    ->    dname varchar(14) default NULL,
    ->    loc varchar(13) default NULL
    -> );
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> INSERT INTO emp VALUES ('7369','SMITH','CLERK','7902','1980-12-17','800.00',NULL,'20');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7499','ALLEN','SALESMAN','7698','1981-02-20','1600.00','300.00','30');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7521','WARD','SALESMAN','7698','1981-02-22','1250.00','500.00','30');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO emp VALUES ('7566','JONES','MANAGER','7839','1981-04-02','2975.00',NULL,'20');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7654','MARTIN','SALESMAN','7698','1981-09-28','1250.00','1400.00','30');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7698','BLAKE','MANAGER','7839','1981-05-01','2850.00',NULL,'30');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7782','CLARK','MANAGER','7839','1981-06-09','2450.00',NULL,'10');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7788','SCOTT','ANALYST','7566','1982-12-09','3000.00',NULL,'20');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7839','KING','PRESIDENT',NULL,'1981-11-17','5000.00',NULL,'10');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7844','TURNER','SALESMAN','7698','1981-09-08','1500.00','0.00','30');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7876','ADAMS','CLERK','7788','1983-01-12','1100.00',NULL,'20');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7900','JAMES','CLERK','7698','1981-12-03','950.00',NULL,'30');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7902','FORD','ANALYST','7566','1981-12-03','3000.00',NULL,'20');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO emp VALUES ('7934','MILLER','CLERK','7782','1982-01-23','1300.00',NULL,'10');
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> INSERT INTO dept VALUES ('10','ACCOUNTING','NEW YORK');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO dept VALUES ('20','RESEARCH','DALLAS');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO dept VALUES ('30','SALES','CHICAGO');
Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO dept VALUES ('40','OPERATIONS','BOSTON');
Query OK, 1 row affected (0.00 sec)

mysql> select * from emp;
+-------+--------+-----------+------+------------+---------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal     | comm    | deptno |
+-------+--------+-----------+------+------------+---------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 |  800.00 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1981-02-20 | 1600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1981-02-22 | 1250.00 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1981-04-02 | 2975.00 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1981-09-28 | 1250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1981-05-01 | 2850.00 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1981-06-09 | 2450.00 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1982-12-09 | 3000.00 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1981-11-17 | 5000.00 |    NULL |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1981-09-08 | 1500.00 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1983-01-12 | 1100.00 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 1981-12-03 |  950.00 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1981-12-03 | 3000.00 |    NULL |     20 |
|  7934 | MILLER | CLERK     | 7782 | 1982-01-23 | 1300.00 |    NULL |     10 |
+-------+--------+-----------+------+------------+---------+---------+--------+
14 rows in set (0.01 sec)

mysql> select * from dept;;
+--------+------------+----------+
| deptno | dname      | loc      |
+--------+------------+----------+
```

```
|     10 | ACCOUNTING | NEW YORK |
|     20 | RESEARCH   | DALLAS   |
|     30 | SALES      | CHICAGO  |
|     40 | OPERATIONS | BOSTON   |
+--------+------------+----------+
4 rows in set (0.00 sec)

ERROR:
No query specified

mysql> select empno,enmae,sal from emp;
ERROR 1054 (42S22): Unknown column 'enmae' in 'field list'
mysql> select empno,enamee,sal from emp;
ERROR 1054 (42S22): Unknown column 'enamee' in 'field list'
mysql> select empno,ename,sal from emp;
+-------+--------+---------+
| empno | ename  | sal     |
+-------+--------+---------+
|  7369 | SMITH  |  800.00 |
|  7499 | ALLEN  | 1600.00 |
|  7521 | WARD   | 1250.00 |
|  7566 | JONES  | 2975.00 |
|  7654 | MARTIN | 1250.00 |
|  7698 | BLAKE  | 2850.00 |
|  7782 | CLARK  | 2450.00 |
|  7788 | SCOTT  | 3000.00 |
|  7839 | KING   | 5000.00 |
|  7844 | TURNER | 1500.00 |
|  7876 | ADAMS  | 1100.00 |
|  7900 | JAMES  |  950.00 |
|  7902 | FORD   | 3000.00 |
|  7934 | MILLER | 1300.00 |
+-------+--------+---------+
14 rows in set (0.00 sec)

mysql> create table emp_select
    -> (empno int,
    -> ename varchar(20),
    -> sal float);
Query OK, 0 rows affected (0.02 sec)

mysql> insert into emp_select select empno,ename,sal from emp;                # inserting data from old table to new table
Query OK, 14 rows affected (0.01 sec)
Records: 14  Duplicates: 0  Warnings: 0

mysql> select * from emp_select;
+-------+--------+------+
| empno | ename  | sal  |
+-------+--------+------+
|  7369 | SMITH  |  800 |
|  7499 | ALLEN  | 1600 |
|  7521 | WARD   | 1250 |
|  7566 | JONES  | 2975 |
|  7654 | MARTIN | 1250 |
|  7698 | BLAKE  | 2850 |
|  7782 | CLARK  | 2450 |
|  7788 | SCOTT  | 3000 |
|  7839 | KING   | 5000 |
|  7844 | TURNER | 1500 |
|  7876 | ADAMS  | 1100 |
|  7900 | JAMES  |  950 |
|  7902 | FORD   | 3000 |
|  7934 | MILLER | 1300 |
+-------+--------+------+
14 rows in set (0.00 sec)

mysql> alter table emp_select add column(job varchar(20), address varchar(20), mobileno int);
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> select * from emp_select;
+-------+--------+------+------+---------+----------+
| empno | ename  | sal  | job  | address | mobileno |
+-------+--------+------+------+---------+----------+
|  7369 | SMITH  |  800 | NULL | NULL    |     NULL |
|  7499 | ALLEN  | 1600 | NULL | NULL    |     NULL |
|  7521 | WARD   | 1250 | NULL | NULL    |     NULL |
|  7566 | JONES  | 2975 | NULL | NULL    |     NULL |
|  7654 | MARTIN | 1250 | NULL | NULL    |     NULL |
|  7698 | BLAKE  | 2850 | NULL | NULL    |     NULL |
|  7782 | CLARK  | 2450 | NULL | NULL    |     NULL |
|  7788 | SCOTT  | 3000 | NULL | NULL    |     NULL |
|  7839 | KING   | 5000 | NULL | NULL    |     NULL |
|  7844 | TURNER | 1500 | NULL | NULL    |     NULL |
|  7876 | ADAMS  | 1100 | NULL | NULL    |     NULL |
|  7900 | JAMES  |  950 | NULL | NULL    |     NULL |
|  7902 | FORD   | 3000 | NULL | NULL    |     NULL |
|  7934 | MILLER | 1300 | NULL | NULL    |     NULL |
+-------+--------+------+------+---------+----------+
14 rows in set (0.00 sec)

mysql> update emp_select set address='Mumbai' where empno=7379;
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0  Changed: 0  Warnings: 0

mysql> select * from emp_select;
+-------+--------+------+------+---------+----------+
| empno | ename  | sal  | job  | address | mobileno |
+-------+--------+------+------+---------+----------+
|  7369 | SMITH  |  800 | NULL | NULL    |     NULL |
|  7499 | ALLEN  | 1600 | NULL | NULL    |     NULL |
|  7521 | WARD   | 1250 | NULL | NULL    |     NULL |
|  7566 | JONES  | 2975 | NULL | NULL    |     NULL |
|  7654 | MARTIN | 1250 | NULL | NULL    |     NULL |
|  7698 | BLAKE  | 2850 | NULL | NULL    |     NULL |
|  7782 | CLARK  | 2450 | NULL | NULL    |     NULL |
|  7788 | SCOTT  | 3000 | NULL | NULL    |     NULL |
|  7839 | KING   | 5000 | NULL | NULL    |     NULL |
|  7844 | TURNER | 1500 | NULL | NULL    |     NULL |
|  7876 | ADAMS  | 1100 | NULL | NULL    |     NULL |
|  7900 | JAMES  |  950 | NULL | NULL    |     NULL |
|  7902 | FORD   | 3000 | NULL | NULL    |     NULL |
|  7934 | MILLER | 1300 | NULL | NULL    |     NULL |
+-------+--------+------+------+---------+----------+
14 rows in set (0.00 sec)

mysql> update emp_select set address='Mumbai' where empno=7369;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from emp_select;
+-------+--------+------+------+---------+----------+
| empno | ename  | sal  | job  | address | mobileno |
```

```
+------+--------+------+------+---------+----------+
| 7369 | SMITH  |  800 | NULL | Mumbai  |     NULL |
| 7499 | ALLEN  | 1600 | NULL | NULL    |     NULL |
| 7521 | WARD   | 1250 | NULL | NULL    |     NULL |
| 7566 | JONES  | 2975 | NULL | NULL    |     NULL |
| 7654 | MARTIN | 1250 | NULL | NULL    |     NULL |
| 7698 | BLAKE  | 2850 | NULL | NULL    |     NULL |
| 7782 | CLARK  | 2450 | NULL | NULL    |     NULL |
| 7788 | SCOTT  | 3000 | NULL | NULL    |     NULL |
| 7839 | KING   | 5000 | NULL | NULL    |     NULL |
| 7844 | TURNER | 1500 | NULL | NULL    |     NULL |
| 7876 | ADAMS  | 1100 | NULL | NULL    |     NULL |
| 7900 | JAMES  |  950 | NULL | NULL    |     NULL |
| 7902 | FORD   | 3000 | NULL | NULL    |     NULL |
| 7934 | MILLER | 1300 | NULL | NULL    |     NULL |
+------+--------+------+------+---------+----------+
14 rows in set (0.00 sec)

mysql> update emp_select set address='Delhi', mobileno=9106714830 where empno=7499;
ERROR 1264 (22003): Out of range value for column 'mobileno' at row 2
mysql> update emp_select set address='Delhi', mobileno=1234567890 where empno=7499;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from emp_select;
+------+--------+------+------+---------+------------+
| empno | ename | sal  | job  | address | mobileno   |
+------+--------+------+------+---------+------------+
| 7369 | SMITH  |  800 | NULL | Mumbai  |       NULL |
| 7499 | ALLEN  | 1600 | NULL | Delhi   | 1234567890 |
| 7521 | WARD   | 1250 | NULL | NULL    |       NULL |
| 7566 | JONES  | 2975 | NULL | NULL    |       NULL |
| 7654 | MARTIN | 1250 | NULL | NULL    |       NULL |
| 7698 | BLAKE  | 2850 | NULL | NULL    |       NULL |
| 7782 | CLARK  | 2450 | NULL | NULL    |       NULL |
| 7788 | SCOTT  | 3000 | NULL | NULL    |       NULL |
| 7839 | KING   | 5000 | NULL | NULL    |       NULL |
| 7844 | TURNER | 1500 | NULL | NULL    |       NULL |
| 7876 | ADAMS  | 1100 | NULL | NULL    |       NULL |
| 7900 | JAMES  |  950 | NULL | NULL    |       NULL |
| 7902 | FORD   | 3000 | NULL | NULL    |       NULL |
| 7934 | MILLER | 1300 | NULL | NULL    |       NULL |
+------+--------+------+------+---------+------------+
14 rows in set (0.00 sec)

mysql> select sal from emp where empno=7566;
+---------+
| sal     |
+---------+
| 2975.00 |
+---------+
1 row in set (0.00 sec)

mysql> update emp_select set sal=(select sal from emp where empno=7521) where empno=7369;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from emp_select;
+------+--------+------+------+---------+------------+
| empno | ename | sal  | job  | address | mobileno   |
+------+--------+------+------+---------+------------+
| 7369 | SMITH  | 1250 | NULL | Mumbai  |       NULL |
| 7499 | ALLEN  | 1600 | NULL | Delhi   | 1234567890 |
| 7521 | WARD   | 1250 | NULL | NULL    |       NULL |
| 7566 | JONES  | 2975 | NULL | NULL    |       NULL |
| 7654 | MARTIN | 1250 | NULL | NULL    |       NULL |
| 7698 | BLAKE  | 2850 | NULL | NULL    |       NULL |
| 7782 | CLARK  | 2450 | NULL | NULL    |       NULL |
| 7788 | SCOTT  | 3000 | NULL | NULL    |       NULL |
| 7839 | KING   | 5000 | NULL | NULL    |       NULL |
| 7844 | TURNER | 1500 | NULL | NULL    |       NULL |
| 7876 | ADAMS  | 1100 | NULL | NULL    |       NULL |
| 7900 | JAMES  |  950 | NULL | NULL    |       NULL |
| 7902 | FORD   | 3000 | NULL | NULL    |       NULL |
| 7934 | MILLER | 1300 | NULL | NULL    |       NULL |
+------+--------+------+------+---------+------------+
14 rows in set (0.00 sec)

mysql> /*
    /*> sub qurey
    /*> */;
Query OK, 0 rows affected (0.01 sec)

mysql> delete from emp_select where empno=7698;
Query OK, 1 row affected (0.00 sec)

mysql> select * from emp_select;
+------+--------+------+------+---------+------------+
| empno | ename | sal  | job  | address | mobileno   |
+------+--------+------+------+---------+------------+
| 7369 | SMITH  | 1250 | NULL | Mumbai  |       NULL |
| 7499 | ALLEN  | 1600 | NULL | Delhi   | 1234567890 |
| 7521 | WARD   | 1250 | NULL | NULL    |       NULL |
| 7566 | JONES  | 2975 | NULL | NULL    |       NULL |
| 7654 | MARTIN | 1250 | NULL | NULL    |       NULL |
| 7782 | CLARK  | 2450 | NULL | NULL    |       NULL |
| 7788 | SCOTT  | 3000 | NULL | NULL    |       NULL |
| 7839 | KING   | 5000 | NULL | NULL    |       NULL |
| 7844 | TURNER | 1500 | NULL | NULL    |       NULL |
| 7876 | ADAMS  | 1100 | NULL | NULL    |       NULL |
| 7900 | JAMES  |  950 | NULL | NULL    |       NULL |
| 7902 | FORD   | 3000 | NULL | NULL    |       NULL |
| 7934 | MILLER | 1300 | NULL | NULL    |       NULL |
+------+--------+------+------+---------+------------+
13 rows in set (0.00 sec)

mysql> create table users(id int,email varchar(30));
Query OK, 0 rows affected (0.02 sec)

mysql> insert into users
    -> values(10,'lucky733@gmail.com'),
    -> (20,'training123@gamil.com'),
    -> (30,'lucky733@gmail.com');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> select * from usersl
    -> ;
ERROR 1146 (42S02): Table 'impact.usersl' doesn't exist
mysql> select * from users;
+------+------------------------+
| id   | email                  |
+------+------------------------+
```

```
|   10 | lucky733@gmail.com   |
|   20 | training123@gamil.com |
|   30 | lucky733@gmail.com   |
+------+-----------------------+
3 rows in set (0.00 sec)

mysql> select distinct(email) from users;
+-----------------------+
| email                 |
+-----------------------+
| lucky733@gmail.com    |
| training123@gamil.com |
+-----------------------+
2 rows in set (0.00 sec)

mysql> select id,distinct(email) from users;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'distinct(email) from user
s' at line 1
mysql> create table emp14
    -> (empno int not null,
    -> ename varchar(10),
    -> sal decimal(10,2));
Query OK, 0 rows affected (0.02 sec)

mysql> insert into emp14 values(101,'smith',4000);
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp14 values(null,'smith',4000);
ERROR 1048 (23000): Column 'empno' cannot be null
mysql> insert into emp14(ename,sal) values('smith',4000);
ERROR 1364 (HY000): Field 'empno' doesn't have a default value
mysql> alter table emp14 column empno int inc;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'column empno int inc' at
line 1
mysql> desc emp14;
+-------+--------------+------+-----+---------+-------+
| Field | Type         | Null | Key | Default | Extra |
+-------+--------------+------+-----+---------+-------+
| empno | int          | NO   |     | NULL    |       |
| ename | varchar(10)  | YES  |     | NULL    |       |
| sal   | decimal(10,2)| YES  |     | NULL    |       |
+-------+--------------+------+-----+---------+-------+
3 rows in set (0.02 sec)

mysql> create table emp15
    -> (empno int not null,
    -> ename varchar(10),
    -> sal decimal(10,2),
    -> gender varchar(1) check(gender='M' or gender='F'),              # boolean type takes only two arguments
    -> job varchar(10));
Query OK, 0 rows affected (0.01 sec)

mysql> insert into emp15
    -> values(1,'raju',3000,'M','hr');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp15 values(2,'Ganesh',5000,'S','Operation');
ERROR 3819 (HY000): Check constraint 'emp15_chk_1' is violated.
mysql> drop table emp15;
Query OK, 0 rows affected (0.01 sec)

mysql> create table emp15
    -> (empno int not null,
    -> ename varchar(10),
    -> gender varchar(1),
    -> job varchar(10),
    -> check(gender='M' or gender='F'));
Query OK, 0 rows affected (0.01 sec)

mysql> insert into emp15 values(2,'Ganesh',5000,'S','Operation');
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql> insert into emp15 values(2,'Ganesh','S','Operation');
ERROR 3819 (HY000): Check constraint 'emp15_chk_1' is violated.
mysql> drop table emp15;
Query OK, 0 rows affected (0.01 sec)

mysql> create table emp15 (empno int not null, ename varchar(10), gender varchar(1), job varchar(10));
Query OK, 0 rows affected (0.01 sec)

mysql> alter table emp15 add constraint GAY h kya check(gender='M' or gender='F');
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'h kya check(gender='M' or
 gender='F')' at line 1
mysql> alter table emp15 add constraint GAY_h_kya check(gender='M' or gender='F');
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> insert into emp15 values(2,'Ganesh','M','Operation');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp15 values(3,'Archit','K','Operation');
ERROR 3819 (HY000): Check constraint 'GAY_h_kya' is violated.
mysql> show create table emp15;                                 # display the constraint
+-------+----------------------------------------------------------------------------------------------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------------------------------------------+
| Table | Create Table
                                                                                                                          |
+-------+----------------------------------------------------------------------------------------------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------------------------------------------+
| emp15 | CREATE TABLE `emp15` (
  `empno` int NOT NULL,
  `ename` varchar(10) DEFAULT NULL,
  `gender` varchar(1) DEFAULT NULL,
  `job` varchar(10) DEFAULT NULL,
  CONSTRAINT `GAY_h_kya` CHECK (((`gender` = _utf8mb4'M') or (`gender` = _utf8mb4'F')))
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+-------+----------------------------------------------------------------------------------------------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------------------------------------------+
1 row in set (0.01 sec)

mysql> alter table emp15 drop constraint GAY_h_kya;             # drop the constraint
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> drop table emp15;
Query OK, 0 rows affected (0.00 sec)

mysql> create table emp15
    -> (empno int unique,
    -> ename varchar(10),
    -> sal decimal(10,2));
Query OK, 0 rows affected (0.02 sec)

mysql> insert into emp15 values(1,'smith',3000);
```

```
Query OK, 1 row affected (0.01 sec)

mysql> insert into emp15 values(1,'smith',3000);
ERROR 1062 (23000): Duplicate entry '1' for key 'emp15.empno'
mysql> insert into emp15 values(null,'smith',3000);                # can't be null because its unique
Query OK, 1 row affected (0.01 sec)

mysql> /* unique can be null but no duplicat */;
Query OK, 0 rows affected (0.00 sec)

mysql> drop table ;emp15
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '' at line 1
    -> drop table emp15;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'emp15
drop table emp15' at line 1
mysql> drop table emp15;
Query OK, 0 rows affected (0.00 sec)

mysql> create table emp15
    -> (empno int primary key,
    -> ename varchar(10),
    -> sal decimal(10,2));
Query OK, 0 rows affected (0.02 sec)

mysql> insert into emp15 values(1,'smith',3000);
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp15 values(1,'smith',3000);
ERROR 1062 (23000): Duplicate entry '1' for key 'emp15.PRIMARY'
mysql> insert into emp15 values(null,'smith',3000);
ERROR 1048 (23000): Column 'empno' cannot be null
mysql> /* Primary key can't be null and don't contain duplicates */;
Query OK, 0 rows affected (0.00 sec)

mysql> drop table emp15;
Query OK, 0 rows affected (0.01 sec)

mysql> create table emp15 (empno int, ename varchar(10), sal decimal(10,2), primary key(empno));
Query OK, 0 rows affected (0.01 sec)

mysql> insert into emp15 values(1,'smith',3000);
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp15 values(1,'smith',3000);
ERROR 1062 (23000): Duplicate entry '1' for key 'emp15.PRIMARY'
mysql> insert into emp15 values(null,'smith',3000);
ERROR 1048 (23000): Column 'empno' cannot be null
mysql> /*
   /*> FOREIGN KEY
   /*> */;
Query OK, 0 rows affected (0.00 sec)

mysql> create table cousre
    -> (cid int,
    -> cname varchar(10),
    -> fee int,
    -> primary key(cid));
Query OK, 0 rows affected (0.02 sec)

mysql> create table student
    -> (sid int,
    -> sname varchar(10),
    -> addrs varchar(10),
    -> cid int,
    -> primary key(sid),
    -> foreign key(cid) REFERENCES course(cid));               # foreign key added
ERROR 1824 (HY000): Failed to open the referenced table 'course'
mysql> rename table cousre to course;
Query OK, 0 rows affected (0.01 sec)

mysql> create table student (sid int, sname varchar(10), addrs varchar(10), cid int, primary key(sid), foreign key(cid) REFERENCES course(cid))                # foreign key
added;
    -> ;
Query OK, 0 rows affected (0.01 sec)

mysql> show ctreate table student;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ctreate table student' at
 line 1
mysql> show create table student;
+---------+---------------------------------------------------------------------------------------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------+
| Table   | Create Table
                                                                                                                                                                              |
+---------+---------------------------------------------------------------------------------------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------+
| student | CREATE TABLE `student` (
  `sid` int NOT NULL,
  `sname` varchar(10) DEFAULT NULL,
  `addrs` varchar(10) DEFAULT NULL,
  `cid` int DEFAULT NULL,
  PRIMARY KEY (`sid`),
  KEY `cid` (`cid`),
  CONSTRAINT `student_ibfk_1` FOREIGN KEY (`cid`) REFERENCES `course` (`cid`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+---------+---------------------------------------------------------------------------------------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------+
1 row in set (0.00 sec)

mysql> insert into course
    -> values(1,"C++",5000),
    -> (2,'WEB',5000),
    -> (3,'PYTHON',3000),
    -> (4,'JAVA',4000);
Query OK, 4 rows affected (0.00 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> select * from course;
+-----+--------+------+
| cid | cname  | fee  |
+-----+--------+------+
|   1 | C++    | 5000 |
|   2 | WEB    | 5000 |
|   3 | PYTHON | 3000 |
|   4 | JAVA   | 4000 |
+-----+--------+------+
4 rows in set (0.00 sec)

mysql> insert into student values(101,'ganesh','mumbai',1);
Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(102,'mahesh','guj',3);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into student values(103,'raju','delhi',4);
Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(103,'raju','delhi',5);
ERROR 1062 (23000): Duplicate entry '103' for key 'student.PRIMARY'
mysql> insert into student values(104,'raju','delhi',5);
ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails (`impact`.`student`, CONSTRAINT `student_ibfk_1` FOREIGN KEY (`cid`) REFERENCES `course` (`cid`
))
mysql> select * from course;
+-----+--------+------+
| cid | cname  | fee  |
+-----+--------+------+
|   1 | C++    | 5000 |
|   2 | WEB    | 5000 |
|   3 | PYTHON | 3000 |
|   4 | JAVA   | 4000 |
+-----+--------+------+
4 rows in set (0.00 sec)

mysql> select * from student;
+-----+--------+--------+------+
| sid | sname  | addrs  | cid  |
+-----+--------+--------+------+
| 101 | ganesh | mumbai |    1 |
| 102 | mahesh | guj    |    3 |
| 103 | raju   | delhi  |    4 |
+-----+--------+--------+------+
3 rows in set (0.00 sec)

mysql> delete from course where cid=1;
ERROR 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails (`impact`.`student`, CONSTRAINT `student_ibfk_1` FOREIGN KEY (`cid`) REFERENCES `course` (`
cid`))
mysql> delete from course where cid=1;                        # Can't delete because is reference for another table
ERROR 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails (`impact`.`student`, CONSTRAINT `student_ibfk_1` FOREIGN KEY (`cid`) REFERENCES `course` (`
cid`))
mysql> create table product_1
    -> (pid int(4) primary key,
    -> pname varchar(10),
    -> price decimal(10,2));
Query OK, 0 rows affected, 1 warning (0.02 sec)

mysql> create table customer_1
    -> (cid int(4) primary key,
    -> cname varchar(10),
    -> caddress varchar(10),
    -> pid int(4),
    -> foreign key(pid) REFERENCES product_1(pid) on delete cascade);
Query OK, 0 rows affected, 2 warnings (0.01 sec)

mysql> show create table costomer_1;
ERROR 1146 (42S02): Table 'impact.costomer_1' doesn't exist
mysql> show create table customer_1;
+------------+----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
--------------------+
| Table      | Create Table

             |
+------------+----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
--------------------+
| customer_1 | CREATE TABLE `customer_1` (
  `cid` int NOT NULL,
  `cname` varchar(10) DEFAULT NULL,
  `caddress` varchar(10) DEFAULT NULL,
  `pid` int DEFAULT NULL,
  PRIMARY KEY (`cid`),
  KEY `pid` (`pid`),
  CONSTRAINT `customer_1_ibfk_1` FOREIGN KEY (`pid`) REFERENCES `product_1` (`pid`) ON DELETE CASCADE
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci |
+------------+----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
--------------------+
1 row in set (0.00 sec)

mysql> insert into product_1
    -> values(1,'mouse',300),
    -> (2,'ram',5000),
    -> (3,'moniter',10000);
Query OK, 3 rows affected (0.00 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> insert into customer_1 values(1001,'gopal','mumb',3);
Query OK, 1 row affected (0.01 sec)

mysql> insert into customer_1 values(1002,'laxmi','guj',1);
Query OK, 1 row affected (0.00 sec)

mysql> insert into customer_1 values(1003,'niley','vad',2);
Query OK, 1 row affected (0.00 sec)

mysql> select * from product_1;
+-----+---------+----------+
| pid | pname   | price    |
+-----+---------+----------+
|   1 | mouse   |   300.00 |
|   2 | ram     |  5000.00 |
|   3 | moniter | 10000.00 |
+-----+---------+----------+
3 rows in set (0.00 sec)

mysql> select * from customer_1;
+------+-------+----------+------+
| cid  | cname | caddress | pid  |
+------+-------+----------+------+
| 1001 | gopal | mumb     |    3 |
| 1002 | laxmi | guj      |    1 |
| 1003 | niley | vad      |    2 |
+------+-------+----------+------+
3 rows in set (0.00 sec)

mysql> delete from product_1 where pid=1;
Query OK, 1 row affected (0.01 sec)

mysql> select * from product_1;
+-----+---------+----------+
| pid | pname   | price    |
+-----+---------+----------+
|   2 | ram     |  5000.00 |
|   3 | moniter | 10000.00 |
+-----+---------+----------+
2 rows in set (0.00 sec)
```

```
mysql> select * from customer_1;
+------+-------+----------+------+
| cid  | cname | caddress | pid  |
+------+-------+----------+------+
| 1001 | gopal | mumb     |    3 |
| 1003 | niley | vad      |    2 |
+------+-------+----------+------+
2 rows in set (0.00 sec)

mysql> select * from emp;
+-------+--------+-----------+------+------------+---------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal     | comm    | deptno |
+-------+--------+-----------+------+------------+---------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 |  800.00 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1981-02-20 | 1600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1981-02-22 | 1250.00 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1981-04-02 | 2975.00 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1981-09-28 | 1250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1981-05-01 | 2850.00 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1981-06-09 | 2450.00 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1982-12-09 | 3000.00 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1981-11-17 | 5000.00 |    NULL |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1981-09-08 | 1500.00 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1983-01-12 | 1100.00 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 1981-12-03 |  950.00 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1981-12-03 | 3000.00 |    NULL |     20 |
|  7934 | MILLER | CLERK     | 7782 | 1982-01-23 | 1300.00 |    NULL |     10 |
+-------+--------+-----------+------+------------+---------+---------+--------+
14 rows in set (0.04 sec)

mysql> select * from dept;
+--------+------------+----------+
| deptno | dname      | loc      |
+--------+------------+----------+
|     10 | ACCOUNTING | NEW YORK |
|     20 | RESEARCH   | DALLAS   |
|     30 | SALES      | CHICAGO  |
|     40 | OPERATIONS | BOSTON   |
+--------+------------+----------+
4 rows in set (0.00 sec)

mysql> insert into emp(empno,ename,sal) values(1001,'gopal',4000);
Query OK, 1 row affected (0.01 sec)

mysql> insert into dept values(50,'testing','SA');
Query OK, 1 row affected (0.01 sec)

mysql> select*from emp;
+-------+--------+-----------+------+------------+---------+---------+--------+
| empno | ename  | job       | mgr  | hiredate   | sal     | comm    | deptno |
+-------+--------+-----------+------+------------+---------+---------+--------+
|  7369 | SMITH  | CLERK     | 7902 | 1980-12-17 |  800.00 |    NULL |     20 |
|  7499 | ALLEN  | SALESMAN  | 7698 | 1981-02-20 | 1600.00 |  300.00 |     30 |
|  7521 | WARD   | SALESMAN  | 7698 | 1981-02-22 | 1250.00 |  500.00 |     30 |
|  7566 | JONES  | MANAGER   | 7839 | 1981-04-02 | 2975.00 |    NULL |     20 |
|  7654 | MARTIN | SALESMAN  | 7698 | 1981-09-28 | 1250.00 | 1400.00 |     30 |
|  7698 | BLAKE  | MANAGER   | 7839 | 1981-05-01 | 2850.00 |    NULL |     30 |
|  7782 | CLARK  | MANAGER   | 7839 | 1981-06-09 | 2450.00 |    NULL |     10 |
|  7788 | SCOTT  | ANALYST   | 7566 | 1982-12-09 | 3000.00 |    NULL |     20 |
|  7839 | KING   | PRESIDENT | NULL | 1981-11-17 | 5000.00 |    NULL |     10 |
|  7844 | TURNER | SALESMAN  | 7698 | 1981-09-08 | 1500.00 |    0.00 |     30 |
|  7876 | ADAMS  | CLERK     | 7788 | 1983-01-12 | 1100.00 |    NULL |     20 |
|  7900 | JAMES  | CLERK     | 7698 | 1981-12-03 |  950.00 |    NULL |     30 |
|  7902 | FORD   | ANALYST   | 7566 | 1981-12-03 | 3000.00 |    NULL |     20 |
|  7934 | MILLER | CLERK     | 7782 | 1982-01-23 | 1300.00 |    NULL |     10 |
|  1001 | gopal  | NULL      | NULL | NULL       | 4000.00 |    NULL |   NULL |
+-------+--------+-----------+------+------------+---------+---------+--------+
15 rows in set (0.00 sec)

mysql> select*from dept;
+--------+------------+----------+
| deptno | dname      | loc      |
+--------+------------+----------+
|     10 | ACCOUNTING | NEW YORK |
|     20 | RESEARCH   | DALLAS   |
|     30 | SALES      | CHICAGO  |
|     40 | OPERATIONS | BOSTON   |
|     50 | testing    | SA       |
+--------+------------+----------+
5 rows in set (0.00 sec)

mysql> select ename as employeename from emp
    -> ;                                                                  #Alias Name
+--------------+
| employeename |
+--------------+
| SMITH        |
| ALLEN        |
| WARD         |
| JONES        |
| MARTIN       |
| BLAKE        |
| CLARK        |
| SCOTT        |
| KING         |
| TURNER       |
| ADAMS        |
| JAMES        |
| FORD         |
| MILLER       |
| gopal        |
+--------------+
15 rows in set (0.00 sec)

mysql> select ename 'employeename' from emp;                             #Alias Name
+--------------+
| employeename |
+--------------+
| SMITH        |
| ALLEN        |
| WARD         |
| JONES        |
| MARTIN       |
| BLAKE        |
| CLARK        |
| SCOTT        |
| KING         |
| TURNER       |
| ADAMS        |
| JAMES        |
| FORD         |
| MILLER       |
| gopal        |
```

```
+---------------+
15 rows in set (0.00 sec)

mysql> select e.empno,e.ename from emp e;
+-------+--------+
| empno | ename  |
+-------+--------+
|  7369 | SMITH  |
|  7499 | ALLEN  |
|  7521 | WARD   |
|  7566 | JONES  |
|  7654 | MARTIN |
|  7698 | BLAKE  |
|  7782 | CLARK  |
|  7788 | SCOTT  |
|  7839 | KING   |
|  7844 | TURNER |
|  7876 | ADAMS  |
|  7900 | JAMES  |
|  7902 | FORD   |
|  7934 | MILLER |
|  1001 | gopal  |
+-------+--------+
15 rows in set (0.00 sec)

mysql> select e.empno,e.ename,e.sal,d.dname from emp e join dept d              #INNER JOIN
    -> on (d.deptno=e.deptno
    -> );
+-------+--------+---------+------------+
| empno | ename  | sal     | dname      |
+-------+--------+---------+------------+
|  7369 | SMITH  |  800.00 | RESEARCH   |
|  7499 | ALLEN  | 1600.00 | SALES      |
|  7521 | WARD   | 1250.00 | SALES      |
|  7566 | JONES  | 2975.00 | RESEARCH   |
|  7654 | MARTIN | 1250.00 | SALES      |
|  7698 | BLAKE  | 2850.00 | SALES      |
|  7782 | CLARK  | 2450.00 | ACCOUNTING |
|  7788 | SCOTT  | 3000.00 | RESEARCH   |
|  7839 | KING   | 5000.00 | ACCOUNTING |
|  7844 | TURNER | 1500.00 | SALES      |
|  7876 | ADAMS  | 1100.00 | RESEARCH   |
|  7900 | JAMES  |  950.00 | SALES      |
|  7902 | FORD   | 3000.00 | RESEARCH   |
|  7934 | MILLER | 1300.00 | ACCOUNTING |
+-------+--------+---------+------------+
14 rows in set (0.00 sec)

mysql> select e.empno,e.ename,e.sal,d.deptno,d.dname from emp e,dept d where d.deptno=e.deptno;
+-------+--------+---------+--------+------------+
| empno | ename  | sal     | deptno | dname      |
+-------+--------+---------+--------+------------+
|  7369 | SMITH  |  800.00 |     20 | RESEARCH   |
|  7499 | ALLEN  | 1600.00 |     30 | SALES      |
|  7521 | WARD   | 1250.00 |     30 | SALES      |
|  7566 | JONES  | 2975.00 |     20 | RESEARCH   |
|  7654 | MARTIN | 1250.00 |     30 | SALES      |
|  7698 | BLAKE  | 2850.00 |     30 | SALES      |
|  7782 | CLARK  | 2450.00 |     10 | ACCOUNTING |
|  7788 | SCOTT  | 3000.00 |     20 | RESEARCH   |
|  7839 | KING   | 5000.00 |     10 | ACCOUNTING |
|  7844 | TURNER | 1500.00 |     30 | SALES      |
|  7876 | ADAMS  | 1100.00 |     20 | RESEARCH   |
|  7900 | JAMES  |  950.00 |     30 | SALES      |
|  7902 | FORD   | 3000.00 |     20 | RESEARCH   |
|  7934 | MILLER | 1300.00 |     10 | ACCOUNTING |
+-------+--------+---------+--------+------------+
14 rows in set (0.00 sec)

mysql> select * from users;
+------+----------------------+
| id   | email                |
+------+----------------------+
|   10 | lucky733@gmail.com   |
|   20 | training123@gamil.com |
|   30 | lucky733@gmail.com   |
+------+----------------------+
3 rows in set (0.00 sec)

mysql> select * from users join users;
ERROR 1066 (42000): Not unique table/alias: 'users'
mysql> select * from users u1 join users u2;
+------+----------------------+------+----------------------+
| id   | email                | id   | email                |
+------+----------------------+------+----------------------+
|   30 | lucky733@gmail.com   |   10 | lucky733@gmail.com   |
|   20 | training123@gamil.com |   10 | lucky733@gmail.com   |
|   10 | lucky733@gmail.com   |   10 | lucky733@gmail.com   |
|   30 | lucky733@gmail.com   |   20 | training123@gamil.com |
|   20 | training123@gamil.com |   20 | training123@gamil.com |
|   10 | lucky733@gmail.com   |   20 | training123@gamil.com |
|   30 | lucky733@gmail.com   |   30 | lucky733@gmail.com   |
|   20 | training123@gamil.com |   30 | lucky733@gmail.com   |
|   10 | lucky733@gmail.com   |   30 | lucky733@gmail.com   |
+------+----------------------+------+----------------------+
9 rows in set (0.01 sec)

mysql> delete u1 from users u1 join users u2                                     # Delete Duplicate
    -> where u1.id>u2.id and u1.email=u2.email;
Query OK, 1 row affected (0.00 sec)

mysql> select * from users;
+------+----------------------+
| id   | email                |
+------+----------------------+
|   10 | lucky733@gmail.com   |
|   20 | training123@gamil.com |
+------+----------------------+
2 rows in set (0.00 sec)

mysql> show tables;
+------------------+
| Tables_in_impact |
+------------------+
| course           |
| customer_1       |
| dept             |
| emp              |
| emp14            |
| emp15            |
| emp_select       |
| product_1        |
| student          |
```

```
| users            |
+------------------+
10 rows in set (0.09 sec)

mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| impact             |
| information_schema |
| mysql              |
| performance_schema |
| sys                |
| world              |
+--------------------+
6 rows in set (0.00 sec)

mysql> create database assignments;
Query OK, 1 row affected (0.02 sec)

mysql> use assignments;
Database changed
mysql> create table customer
    -> (custid int,
    -> name varchar(20),
    -> primary key(custid));
Query OK, 0 rows affected (0.03 sec)

mysql> create table product
    -> productid int,
    -> name varchar(20),
    -> price int,
    -> quantity int,
    -> primary key(productid));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'productid int,
name varchar(20),
price int,
quantity int,
primary key(productid)' at line 2
mysql> create table product (productid int, name varchar(20), price int, quantity int, primary key(productid));
Query OK, 0 rows affected (0.01 sec)

mysql> create table order
    -> (orderid int,
    -> productid int,
    -> quantity int,
    -> custid int,
    -> foreign key(productid) REFERENCES product(productid));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'order
(orderid int,
productid int,
quantity int,
custid int,
foreign key(product' at line 1
mysql> create table orders
    -> (orderid int primary key,
    -> productid int,
    -> quantity int,
    -> custid int,
    -> foreign key(productid) REFERENCES product(productid),
    -> foreign key(custid) REFERENCES customer(custid));
Query OK, 0 rows affected (0.03 sec)

mysql> create table orderstatus
    ->  (orderid int primary key,
    ->     -> productid int,
    -> 1
    -> ;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '-> productid int,
1' at line 3
mysql> create table orderstatus
    -> (orderid int primary key,
    -> status varchar(20),
    -> delivereddate date);
Query OK, 0 rows affected (0.01 sec)

mysql> insert into customer
    -> values(1,'john'),
    -> (2,'james');
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> insert into product
    -> values(101,'X',10,10),
    -> (102,'Y',6,6);
Query OK, 2 rows affected (0.00 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> insert into orders
    -> values(1001,101,5,1),
    -> (1002,101,3,1),
    -> (1003,102,2,2);
Query OK, 3 rows affected (0.00 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> insert into orderstatus
    -> values(1001,'Delivered','2020-08-14'),
    -> (1002,'Not Delivered',NULL),
    -> (1003,'Not Delivered',NULL);
Query OK, 3 rows affected (0.00 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql>
```