```
| student            |
| sys                |
| world              |
+--------------------+
17 rows in set (0.01 sec)

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

mysql> use employee;
Database changed
mysql> create table dept(
    -> deptno decimal(2,0) primary key,
    -> dname varchar(14) default NULL);
Query OK, 0 rows affected (0.02 sec)

mysql> create table emp(
    -> empno decimal94,0) 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);
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 'decimal94,0) primary key,
ename varchar(10) default NULL,
mgr_no decimal(4,0) de' at line 2
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 (0.02 sec)

mysql> create table incentives(
    -> empno decimal(4,0) references emp(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> create table project9
    -> pno int primary key,
    -> pno int primary key;;;
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 'pno int primary key,
pno int primary key' at line 2
ERROR:
No query specified

ERROR:
```

```
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 'pno int primary key,
pno int primary key' at line 2
ERROR:
No query specified

ERROR:
No query specified

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> 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> show tables;
+----------------------+
| Tables_in_employee   |
+----------------------+
| assigned_to          |
| dept                 |
| emp                  |
| incentives           |
| project              |
+----------------------+
5 rows in set (0.00 sec)

mysql> insert into dept values(10,'ACCOUNTING','MUMBAI');
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql> DESC dept;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| deptno | decimal(2,0)| NO   | PRI | NULL    |       |
| dname  | varchar(14) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
2 rows in set (0.00 sec)

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

mysql> show tables;
+----------------------+
| Tables_in_employee   |
+----------------------+
```

```
Query OK, 0 rows affected (0.01 sec)

mysql> show tables;
+---------------------+
| Tables_in_employee  |
+---------------------+
| assigned_to         |
| emp                 |
| incentives          |
| project             |
+---------------------+
4 rows in set (0.00 sec)

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

mysql> show tables;
+---------------------+
| Tables_in_employee  |
+---------------------+
| 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 (0.00 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   |
```

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

mysql> insert into emp values(7521,'Anvitha',7698,'2015-02-22', '12500.00','30');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7566,'Tanvir',7839,'2008-04-02', '29750.00','20');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7654,'Ramesh',7698,'2014-09-28', '12500.00','30');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7698,'Kumar',7839,'2015-05-01', '28500.00','30');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7782,'CLARK',7839,'2017-06-09', '24500.00','10');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7788,'SCOTT',7566,'2010-12-09', '30000.00','20');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7839,'KING',NULL,'2009-11-17', '50000.00','10');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7844,'TURNER',7698,'2010-09-08', '15000.00','30');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7876,'ADAMS',7788,'2013-01-12', '11000.00','20');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7900,'JAMES',7698,'2017-12-03', '9500.00','30');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7902,'FORD',7566,'2010-12-03', '30000.00','20');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into emp values(7900,'JAMES',7698,'2017-12-03', '9500.00','30');
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp values(7902,'FORD',7566,'2010-12-03', '30000.00','20');
Query OK, 1 row affected (0.00 sec)

mysql> select * from emp;
+-------+---------+--------+------------+----------+--------+
| empno | ename   | mgr_no | hiredate   | sal      | deptno |
+-------+---------+--------+------------+----------+--------+
|  7369 | Adarsh  |   7902 | 2012-12-17 | 80000.00 |     20 |
|  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 |
|  7654 | Ramesh  |   7698 | 2014-09-28 | 12500.00 |     30 |
|  7698 | Kumar   |   7839 | 2015-05-01 | 28500.00 |     30 |
|  7782 | CLARK   |   7839 | 2017-06-09 | 24500.00 |     10 |
|  7788 | SCOTT   |   7566 | 2010-12-09 | 30000.00 |     20 |
|  7839 | KING    |   NULL | 2009-11-17 | 50000.00 |     10 |
|  7844 | TURNER  |   7698 | 2010-09-08 | 15000.00 |     30 |
|  7876 | ADAMS   |   7788 | 2013-01-12 | 11000.00 |     20 |
|  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> update emp set sal='500000.00' where ename = 'KING';
ERROR 1264 (22003): Out of range value for column 'sal' at row 9
mysql> insert into incentives values(7499,'2019-02-01', 5000.00);
Query OK, 1 row affected (0.00 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);
Query OK, 1 row affected (0.00 sec)

mysql> insert into incentives values(7566,'2020-02-01', 2000.00);
Query OK, 1 row affected (0.00 sec)

mysql> insert into incentives values(7654,'2022-04-01', 879.00);
Query OK, 1 row affected (0.00 sec)

mysql> update incentives set empno = 7654 where incentive_date = '2020-02-01';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> insert into incentives values(7521,'2019-02-01', 8000.00);
Query OK, 1 row affected (0.00 sec)

mysql> insert into incentives values(7698,'2019-03-01', 500.00);
```

```
mysql> insert into incentives values(7654,'2022-04-01', 879.00);
Query OK, 1 row affected (0.00 sec)

mysql> update incentives set empno = 7654 where incentive_date = '2020-02-01';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> insert into incentives values(7521,'2019-02-01', 8000.00);
Query OK, 1 row affected (0.00 sec)

mysql> insert into incentives values(7698,'2019-03-01', 500.00);
Query OK, 1 row affected (0.00 sec)

mysql> insert into incentives values(7698,'2020-03-01', 9000.00);
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 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 (0.00 sec)

mysql> insert into project values(102,'IOT','HYDERABAD');
Query OK, 1 row affected (0.00 sec)

mysql> insert into project values(104,'BLOCKCHAIM','BENGALURU');
Query OK, 1 row affected (0.00 sec)

mysql> update project set pno = 103 where pname = 'BLOCKCHAIN';
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0  Changed: 0  Warnings: 0

mysql> select * from project;
+-----+------------+-----------+
```

```
mysql> select * from project;
+-----+------------+-----------+
| pno | pname      | ploc      |
+-----+------------+-----------+
| 101 | AI Project | BENGALURU |
| 102 | IOT        | HYDERABAD |
| 104 | BLOCKCHAIM | BENGALURU |
+-----+------------+-----------+
3 rows in set (0.00 sec)

mysql> delete from project where pno = 104;
Query OK, 1 row affected (0.00 sec)

mysql> insert into project values(103,'BLOCKCHAIN','BENGALURU');
Query OK, 1 row affected (0.00 sec)

mysql> insert into project values(104,'DATA SCIENCE','MYSURU');
Query OK, 1 row affected (0.00 sec)

mysql> insert into project values(105,'AUTONOMUS SYSTEMS','PUNE');
Query OK, 1 row affected (0.00 sec)

mysql> selct * from project;
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 'selct * from project' at line 1
mysql> select * from project;
+-----+-------------------+-----------+
| pno | pname             | ploc      |
+-----+-------------------+-----------+
| 101 | AI Project        | BENGALURU |
| 102 | IOT               | HYDERABAD |
| 103 | BLOCKCHAIN        | BENGALURU |
| 104 | DATA SCIENCE      | MYSURU    |
| 105 | AUTONOMUS SYSTEMS | PUNE      |
+-----+-------------------+-----------+
5 rows in set (0.00 sec)

mysql> insert into assigned_to values(7499,101,'Software Engineer');
Query OK, 1 row affected (0.00 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(7654,102,'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(7499,101,'Software Engineer');
Query OK, 1 row affected (0.00 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(7654,102,'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(7839,104,'General Manager');
Query OK, 1 row affected (0.00 sec)

mysql> select * from assigned_to;
+-------+-----+--------------------+
| empno | pno | job_role           |
+-------+-----+--------------------+
|  7499 | 101 | Software Engineer  |
|  7499 | 102 | Software Engineer  |
|  7521 | 101 | Software Architect |
|  7521 | 102 | Software Engineer  |
|  7566 | 101 | Project Manager    |
|  7654 | 102 | Sales              |
|  7654 | 103 | Cyber Security     |
|  7698 | 104 | Software Engineer  |
|  7839 | 104 | General Manager    |
|  7900 | 105 | Software Engineer  |
+-------+-----+--------------------+
10 rows in set (0.00 sec)

mysql>
```

```
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 |
|  7654 |
|  7698 |
|  7839 |
+-------+
9 rows in set (0.00 sec)

mysql> select empno from emp where wmpno not in (select empno from incentives);
ERROR 1054 (42S22): Unknown column 'wmpno' in 'IN/ALL/ANY subquery'
mysql> select empno from emp where empno not in (select empno from incentives);
+-------+
| empno |
+-------+
|  7369 |
|  7782 |
|  7788 |
|  7839 |
|  7844 |
|  7876 |
|  7900 |
|  7902 |
+-------+
8 rows in set (0.00 sec)

mysql> select e.ename, e.empno, d.dname, a.job_role, d.dloc, 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.dloc = p.ploc;
+--------+-------+----------+------------------+-----------+-----------+
| ename  | empno | dname    | job_role         | dloc      | ploc      |
+--------+-------+----------+------------------+-----------+-----------+
| Tanvir |  7566 | RESEARCH | project manager  | BENGALURU | BENGALURU |
+--------+-------+----------+------------------+-----------+-----------+
1 row in set (0.00 sec)

mysql> update emp set sal = 1.5*sal;
ERROR 1264 (22003): Out of range value for column 'sal' at row 1
mysql> update emp set sal = 1.05*sal;
Query OK, 13 rows affected (0.00 sec)
```

```
|   7902 |
+--------+
8 rows in set (0.00 sec)

mysql> select e.ename, e.empno, d.dname, a.job_role, d.dloc, 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.dloc = p.ploc;
+----------+--------+-----------+------------------+-----------+-----------+
| ename    | empno  | dname     | job_role         | dloc      | ploc      |
+----------+--------+-----------+------------------+-----------+-----------+
| Tanvir   |  7566  | RESEARCH  | project manager  | BENGALURU | BENGALURU |
+----------+--------+-----------+------------------+-----------+-----------+
1 row in set (0.00 sec)

mysql> update emp set sal = 1.5*sal;
ERROR 1264 (22003): Out of range value for column 'sal' at row 1
mysql> update emp set sal = 1.05*sal;
Query OK, 13 rows affected (0.00 sec)
Rows matched: 13  Changed: 13  Warnings: 0

mysql> select * from emp;
+--------+----------+---------+------------+----------+--------+
| empno  | ename    | mgr_no  | hiredate   | sal      | deptno |
+--------+----------+---------+------------+----------+--------+
|   7369 | Adarsh   |   7902  | 2012-12-17 | 84000.00 |     20 |
|   7499 | Shruthi  |   7698  | 2013-02-20 | 16800.00 |     30 |
|   7521 | Anvitha  |   7698  | 2015-02-22 | 13125.00 |     30 |
|   7566 | Tanvir   |   7839  | 2008-04-02 | 31237.50 |     20 |
|   7654 | Ramesh   |   7698  | 2014-09-28 | 13125.00 |     30 |
|   7698 | Kumar    |   7839  | 2015-05-01 | 29925.00 |     30 |
|   7782 | CLARK    |   7839  | 2017-06-09 | 25725.00 |     10 |
|   7788 | SCOTT    |   7566  | 2010-12-09 | 31500.00 |     20 |
|   7839 | KING     |   NULL  | 2009-11-17 | 52500.00 |     10 |
|   7844 | TURNER   |   7698  | 2010-09-08 | 15750.00 |     30 |
|   7876 | ADAMS    |   7788  | 2013-01-12 | 11550.00 |     20 |
|   7900 | JAMES    |   7698  | 2017-12-03 |  9975.00 |     30 |
|   7902 | FORD     |   7566  | 2010-12-03 | 31500.00 |     20 |
+--------+----------+---------+------------+----------+--------+
13 rows in set (0.00 sec)

mysql> select ename from emp where ename like 'A%';
+----------+
| ename    |
+----------+
| Adarsh   |
| Anvitha  |
| ADAMS    |
+----------+
3 rows in set (0.00 sec)

mysql>
```