

## Primary key foreign key unique

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MySQL 8.0 Command Line Client
21 rows in set (0.01 sec)

mysql> use db5;
Database changed
mysql> show tables;
Empty set (0.01 sec)

mysql> desc db9;
ERROR 1146 (42S02): Table 'db5.db9' doesn't exist
mysql> describe db9. student;
+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+
| rollno | int           | YES  |     | NULL    |       |
| sname  | varchar(20)   | YES  |     | NULL    |       |
| dob    | date          | YES  |     | NULL    |       |
+-----+
3 rows in set (0.01 sec)

mysql> select * from db9. student;
+-----+
| rollno | sname | dob      |
+-----+
| 1      | hari  | 2000-02-03 |
| 3      | siva  | 2003-05-06 |
+-----+
2 rows in set (0.00 sec)

mysql> insert into db9. student values(2, "kavi", "2000-03-04");
Query OK, 1 row affected (0.01 sec)

mysql> insert into db9. student values(4, "sis", "2002-05-07");
Query OK, 1 row affected (0.00 sec)

mysql> select * from db9. student;
+-----+
| rollno | sname | dob      |
+-----+
| 1      | hari  | 2000-02-03 |
| 3      | siva  | 2003-05-06 |
+-----+
```

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MySQL 8.0 Command Line Client
mysql> select * from db9. student;
+-----+
| rollno | sname | dob      |
+-----+
| 1      | hari  | 2000-02-03 |
| 3      | siva  | 2003-05-06 |
| 2      | kavi  | 2000-03-04 |
| 4      | sis   | 2002-05-07 |
+-----+
4 rows in set (0.00 sec)

mysql> alter table db9. student
-> add primary key(rollno);
Query OK, 0 rows affected (0.09 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> desc db9. student;
+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+
| rollno | int           | NO   | PRI | NULL    |       |
| sname  | varchar(20)   | YES  |     | NULL    |       |
| dob    | date          | YES  |     | NULL    |       |
+-----+
3 rows in set (0.00 sec)

mysql> insert into db9. student values(1, "siva", "2000-02-03");
ERROR 1062 (23000): Duplicate entry '1' for key 'student.PRIMARY'
mysql> create database school2;
Query OK, 1 row affected (0.00 sec)

mysql> use school;
Database changed
mysql> create table student(stu_id int(10) primary key,
-> stu_fname varchar (25) not null,stu_lname varchar (25) not null,
-> Gender varchar (1) not null, Phone int (10) not null,
-> stuDOB date );
ERROR 1050 (42S01): Table 'student' already exists
mysql> create table student(stu_id int(10) primary key,
-> stu_fname varchar (25) not null,stu_lname varchar (25) not null,
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MySQL 8.0 Command Line Client
-> Gende' at line 2
mysql> create table student1(stu_id int(10) primary key,
-> stu_FName varchar(25) not null,stu_LName varchar(25) not null,
-> Gender varchar(1) not null, Phone int(10) not null,
-> stu_DOB date );
Query OK, 0 rows affected, 2 warnings (0.02 sec)

mysql> create table course1(c_title varchar(30) not null,c_code varchar(10) not null,
-> Lec_Name varchar(25) not null,stu_id int(10) not null,
-> CONSTRAINT fk_stuID FOREIGN KEY(stu_id) REFERENCES student(stu_id) on update cascade);
ERROR 1826 (HY000): Duplicate foreign key constraint name 'fk_stuID'
mysql> create table courss1(c_title varchar(30) not null,c_code varchar(10) not null,
-> Lec_Name varchar(25) not null,stu_id int(10) not null,
-> CONSTRAINT fk1_stuID FOREIGN KEY(stu_id) REFERENCES student(stu_id) on update cascade);
Query OK, 0 rows affected, 1 warning (0.04 sec)

mysql> describe student1;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| stu_id | int | NO | PRI | NULL | |
| stu_FName | varchar(25) | NO | | NULL | |
| stu_LName | varchar(25) | NO | | NULL | |
| Gender | varchar(1) | NO | | NULL | |
| Phone | int | NO | | NULL | |
| stu_DOB | date | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> desc course1;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| c_title | varchar(30) | NO | | NULL | |
| c_code | varchar(10) | NO | | NULL | |
| Lec_Name | varchar(25) | NO | | NULL | |
| stu_id | int | NO | MUL | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
MySQL 8.0 Command Line Client
mysql> CREATE TABLE u_tab(stu_id int(10) UNIQUE KEY,
-> name varchar(30),
-> rollno int(5) UNIQUE KEY,
-> CITY VARCHAR(40));
Query OK, 0 rows affected, 2 warnings (0.04 sec)

mysql> DESC u_tab;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| stu_id | int | YES | UNI | NULL | |
| name | varchar(30) | YES | | NULL | |
| rollno | int | YES | UNI | NULL | |
| CITY | varchar(40) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> INSERT INTO u_tab (stu_id, name, roll, city)
-> values(1,"ram",101,"delhi");
ERROR 1054 (42S22): Unknown column 'roll' in 'field list'
mysql> INSERT INTO u_tab (stu_id, name, roll, city)values(1,"ram",101,"delhi");
ERROR 1054 (42S22): Unknown column 'roll' in 'field list'
mysql> INSERT INTO u_tab (stu_id, name, roll, city)
-> ;
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
mysql> INSERT INTO u_tab (stu_id, name, rollno, city)
-> values(1,"ram",101,"delhi");
ERROR 1054 (42S22): Unknown column 'rollno' in 'field list'
mysql> INSERT INTO u_tab (stu_id, name, rollno, city)
-> values(1,"ram",101,"delhi");
Query OK, 1 row affected (0.00 sec)

mysql> SELECT *FROM u_tab;
+-----+-----+-----+-----+
| stu_id | name | rollno | CITY |
+-----+-----+-----+-----+
| 1 | ram | 101 | delhi |
+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

```
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ERROR 1054 (42S22): Unknown column 'roll' in 'field list'
mysql> INSERT INTO u_tab (stu_id, name, roll, city)
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-> values(1,"ram",101,"delhi");
ERROR 1054 (42S22): Unknown column 'rollno' in 'field list'
mysql> INSERT INTO u_tab (stu_id, name, rollno, city)
-> values(1,"ram",101,"delhi");
Query OK, 1 row affected (0.00 sec)

mysql> SELECT *FROM u_tab;
+-----+
| stu_id | name | rollno | CITY |
+-----+
| 1 | ram | 101 | delhi |
+-----+
1 row in set (0.00 sec)

mysql> INSERT INTO u_tab (name, rollno, city)
-> values ("sam", 102, "delhi");
Query OK, 1 row affected (0.00 sec)

mysql> select * from u_tab;
+-----+
| stu_id | name | rollno | CITY |
+-----+
| 1 | ram | 101 | delhi |
| NULL | sam | 102 | delhi |
+-----+
2 rows in set (0.00 sec)

mysql>
```