

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

mysql> use employee;
Database changed

mysql> create table dept(dep_no int,d_name varchar(20),d_loc varchar(20) primary key(dep_no));
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 '(dep_no)' at line 1

mysql> create table dept(dep_no int,d_name varchar(20),d_loc varchar(20), primary key(dep_no));
Query OK, 0 rows affected (0.02 sec)

mysql> create table employee(emp_no int primary key,e_name varchar(20),mgr_no int,hire_date date,salary int, foreign key (dep_no) references dept(dep_no) on delete cascade on update cascade);
ERROR 1072 (42000): Key column 'dep_no' doesn't exist in table

mysql> create table employee(emp_no int primary key,e_name varchar(20),mgr_no int,hire_date date,salary int, dep_no int,foreign key (dep_no) references dept(dep_no) on delete cascade on update cascade);
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> create table incentives(emp_no int, incentive_date date, incentive_amt int, primary key(emp_no,
incentive_date), foreign key(emp_no) references employee(emp_no) on delete cascade on update cascade);
Query OK, 0 rows affected (0.02 sec)

mysql> create table project(p_no int primary key, p_loc varchar(20), p_name varchar(20));
Query OK, 0 rows affected (0.02 sec)

mysql> create table assignad_to(emp_no int, p_no int, job_role varchar(20), primary key(emp_no,p_no),
foreign key(emp_no) references employee(emp_no) on update cascade on delete cascade, foreign key(p_no)
references project(p_no) on update casade on delete 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 'casade on delete cascade)' at line 1

mysql> create table assignad_to(emp_no int, p_no int, job_role varchar(20), primary key(emp_no,p_no),
foreign key(emp_no) references employee(emp_no) on update cascade on delete cascade, foreign key(p_no)
references project(p_no) on update casade on delete 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 'casade on delete cascade)' at line 1

mysql> create table assignad_to(emp_no int, p_no int, job_role varchar(20), primary key(emp_no,p_no), foreign key(emp_no) references employee(emp_no) on update cascade on delete cascade, foreign key(p_no) refe
rences project(p_no) on update cascade on delete cascade);
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> show tables;
```

```

+-----+
| Tables_in_employee |
+-----+
| assignad_to         |
| dept                |
| employee            |
| incentives          |
| project             |
+-----+
```

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

```
mysql> desc assigned_to;
ERROR 1146 (42S02): Table 'employee.assigned_to' doesn't exist
mysql> desc assignad_to;
```

```

+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| emp_no | int | NO | PRI | NULL | |
| p_no | int | NO | PRI | NULL | |
| job_role | varchar(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
```

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

```
mysql> desc dept;
```

```

+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| dep_no | int | NO | PRI | NULL | |
| d_name | varchar(20) | YES | | NULL | |
| d_loc | varchar(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
```

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

```
mysql> desc employee;
```

```
mysql> desc employee;
```

Field	Type	Null	Key	Default	Extra
emp_no	int	NO	PRI	NULL	
e_name	varchar(20)	YES		NULL	
mgr_no	int	YES		NULL	
hire_date	date	YES		NULL	
salary	int	YES		NULL	
dep_no	int	YES	MUL	NULL	

```
6 rows in set (0.00 sec)

mysql> desc incentives;
```

Field	Type	Null	Key	Default	Extra
emp_no	int	NO	PRI	NULL	
incentive_date	date	NO	PRI	NULL	
incentive_amt	int	YES		NULL	

```
3 rows in set (0.00 sec)

mysql> desc project;
```

Field	Type	Null	Key	Default	Extra
p_no	int	NO	PRI	NULL	
p_loc	varchar(20)	YES		NULL	
p_name	varchar(20)	YES		NULL	

```
3 rows in set (0.00 sec)

mysql> insert into dept values(10,"accounting","mumbai"),(20,"research","benglore");
Query OK, 2 rows affected (0.01 sec)
Records: 2 Duplicates: 0 Warnings: 0

mysql> select * from dept;
```

dep_no	d_name	d_loc
10	accounting	mumbai
20	research	benglore

```
2 rows in set (0.00 sec)

mysql> insert into dept values(30,"sales","delhi"),(40,"operations","chennai");
Query OK, 2 rows affected (0.00 sec)
```

```
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 'values(7876,"adams",7788,"2013-01-12",11000,20),(7900,"james",7698,"2017-12-03",9500,30);' at line 1
mysql> insert into employee values(7876,"adams",7788,"2013-01-12",11000,20),(7900,"james",7698,"2017-12-03",9500,30);
Query OK, 2 rows affected (0.00 sec)
Records: 2 Duplicates: 0 Warnings: 0

mysql> insert into employee values(7902,"ford",7566,"2010-12-03",30000,20);
Query OK, 1 row affected (0.00 sec)

mysql> select * from employee;
```

emp_no	e_name	mgr_no	hire_date	salary	dep_no
7369	adarsh	7902	2012-12-17	80000	20
7499	sruthi	7698	2013-02-20	16000	30
7521	anvitha	7698	2015-02-22	12500	30
7566	tanvir	7839	2008-04-02	29750	20
7654	ramesh	7698	2014-09-28	12500	30
7698	kumar	7839	2015-05-01	28500	30
7782	clark	7839	2017-06-09	24500	10
7788	scott	7566	2010-12-09	30000	20
7834	turner	7698	2010-09-08	15000	30
7839	king	NULL	2009-11-17	99999	10
7876	adams	7788	2013-01-12	11000	20
7900	james	7698	2017-12-03	9500	30
7902	ford	7566	2010-12-03	30000	20

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

```
mysql> select * from project;
Empty set (0.01 sec)
```

```
mysql> insert into incentives values(7499,"2019-02-01",5000),(7521,"2019-02-01",8000);
"> ^C
mysql> insert into incentives values(7499,"2019-02-01",5000),(7521,"2019-02-01",8000);
Query OK, 2 rows affected (0.01 sec)
Records: 2 Duplicates: 0 Warnings: 0
```

```
mysql> desc employee;
```

Field	Type	Null	Key	Default	Extra
emp_no	int	NO	PRI	NULL	
e_name	varchar(20)	YES		NULL	
mgr_no	int	YES		NULL	
hire_date	date	YES		NULL	
salary	int	YES		NULL	
dep_no	int	YES	MUL	NULL	

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

```
mysql> insert into incentives values(7521,"2019-03-01",2500),(7566,"2022-02-01",5070);
Query OK, 2 rows affected (0.00 sec)
Records: 2 Duplicates: 0 Warnings: 0
```

```
mysql> insert into incentives values(7654,"2020-02-01",2000),(7654,"2022-04-01",879);
Query OK, 2 rows affected (0.00 sec)
Records: 2 Duplicates: 0 Warnings: 0
```

```
mysql> insert into incentives values(7698,"2019-03-01",500),(7698,"2020-03-01",9000);
Query OK, 2 rows affected (0.00 sec)
Records: 2 Duplicates: 0 Warnings: 0
```

```
mysql> insert into incentives values(7698,"2022-04-01",4500);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from incentives;
```

emp_no	incentive_date	incentive_amt
7499	2019-02-01	5000
7521	2019-02-01	8000
7521	2019-03-01	2500
7566	2022-02-01	5070
7654	2020-02-01	2000
7654	2022-04-01	879
7698	2019-03-01	500
7698	2020-03-01	9000
7698	2022-04-01	4500

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

```
mysql> insert into project values(101,"ai_project","benglore");
Query OK, 1 row affected (0.00 sec)

mysql> insert into project values(102,"iot","hyderabad"),(103,"blockchain","benglore");
Query OK, 2 rows affected (0.00 sec)
Records: 2 Duplicates: 0 Warnings: 0

mysql> insert into project values(104,"data_science","mysore"),(105,"autonomus_systems","pune");
Query OK, 2 rows affected (0.00 sec)
Records: 2 Duplicates: 0 Warnings: 0
```

```
mysql> select 8 from project;
```

```
+----+
| 8 |
+----+
| 8 |
| 8 |
| 8 |
| 8 |
| 8 |
+----+
```

5 rows in set (0.00 sec)

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

```
+-----+-----+-----+
| p_no | p_loc | p_name |
+-----+-----+-----+
| 101 | ai_project | benglore |
| 102 | iot | hyderabad |
| 103 | blockchain | benglore |
| 104 | data_science | mysore |
| 105 | autonomus_systems | pune |
+-----+-----+-----+
```

5 rows in set (0.00 sec)

```
mysql> insert into assignad_to(7499,101,"software_engineer"),(7499,102,"software_engineer"),(7521,101,
"software_architect");
```

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 '7499,101,"software_engineer"),(7499,102,"software_engineer"),(7521,101,"software' at line 1

```
mysql> insert into assignad_to values(7499,101,"software_engineer"),(7499,102,"software_engineer"),(7521,101,"software_architect");
```

Query OK, 3 rows affected (0.00 sec)
Records: 3 Duplicates: 0 Warnings: 0

```
mysql> insert into assignad_to values(7521,102,"software_engineer"),(7566,101,"project_manager"),(7654,102,"sales");
```

Query OK, 3 rows affected (0.00 sec)
Records: 3 Duplicates: 0 Warnings: 0

```
ar '(7900,105,"software_engineer")' at line 1
```

```
mysql> insert into assignad_to values(7654,103,"cyber_security"),(7698,104,"software_engineer"),(7839,104,"general_manager"),(7900,105,"software_engineer");
```

Query OK, 4 rows affected (0.00 sec)
Records: 4 Duplicates: 0 Warnings: 0

```
mysql> select * from assigned_to;
```

ERROR 1146 (42S02): Table 'employee.assigned_to' doesn't exist

```
mysql> select * from assignad_to;
```

```
+-----+-----+-----+
| emp_no | p_no | 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> select emp_id from employee where emp_id not in(select * from incentives);
```

ERROR 1054 (42S22): Unknown column 'emp_id' in 'field list'

```
mysql> select emp_no from employee where emp_no not in(select emp_no from incentives);
```

```
+-----+
| emp_no |
+-----+
| 7782 |
| 7839 |
| 7369 |
| 7788 |
| 7876 |
| 7902 |
| 7834 |
| 7900 |
+-----+
```

8 rows in set (0.00 sec)

```
mysql> select e.emp_no from employee e, assignad_to a,project p where e.emp_no=a.emp_no and a.p_no=p.p_no and p.p_name not in ("pune");
+-----+
| emp_no |
+-----+
| 7499 |
| 7521 |
| 7566 |
| 7499 |
| 7521 |
| 7654 |
| 7654 |
| 7698 |
| 7839 |
+-----+
9 rows in set (0.00 sec)

mysql> select e.emp_no from employee e, assignad_to a,project p where e.emp_no=a.emp_no and a.p_no=p.p_no and p.p_name in (" benglore");
Empty set (0.00 sec)

mysql> select e.emp_no from employee e, assignad_to a,project p where e.emp_no=a.emp_no and a.p_no=p.p_no and p.p_name in (" mysore");
Empty set (0.00 sec)

mysql> select e.emp_no,e.e_name,d.d_name,d.d_loc,a.job_role,p.p_name from employee e, dept d, assignad
_to a, project p where e.dep_no=d.dep_no and e.emp_no=a.emp_no and a.p_no=p.p_no and d.d_loc=p.p_name;

+-----+-----+-----+-----+-----+-----+
| emp_no | e_name | d_name | d_loc | job_role | p_name |
+-----+-----+-----+-----+-----+-----+
| 7566 | tanvir | research | benglore | project_manager | benglore |
+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> select a.emp_no from assignad_to a,project p where a.p_no=p.p_no and p.p_name in (" benglore","
hyderabad"," mysore");
Empty set (0.00 sec)

mysql> update employee set salary=1.05*salary;
Query OK, 13 rows affected (0.00 sec)
Rows matched: 13 Changed: 13 Warnings: 0
```

Rows matched: 13 Changed: 13 Warnings: 0

```
mysql> select * from employee;

+-----+-----+-----+-----+-----+-----+
| emp_no | e_name | mgr_no | hire_date | salary | dep_no |
+-----+-----+-----+-----+-----+-----+
| 7369 | adarsh | 7902 | 2012-12-17 | 84000 | 20 |
| 7499 | sruthi | 7698 | 2013-02-20 | 16800 | 30 |
| 7521 | anvitha | 7698 | 2015-02-22 | 13125 | 30 |
| 7566 | tanvir | 7839 | 2008-04-02 | 31238 | 20 |
| 7654 | ramesh | 7698 | 2014-09-28 | 13125 | 30 |
| 7698 | kumar | 7839 | 2015-05-01 | 29925 | 30 |
| 7782 | clark | 7839 | 2017-06-09 | 25725 | 10 |
| 7788 | scott | 7566 | 2010-12-09 | 31500 | 20 |
| 7834 | turner | 7698 | 2010-09-08 | 15750 | 30 |
| 7839 | king | NULL | 2009-11-17 | 104999 | 10 |
| 7876 | adams | 7788 | 2013-01-12 | 11550 | 20 |
| 7900 | james | 7698 | 2017-12-03 | 9975 | 30 |
| 7902 | ford | 7566 | 2010-12-03 | 31500 | 20 |
+-----+-----+-----+-----+-----+-----+
13 rows in set (0.00 sec)

mysql> select e_name from employee where e_name like "a%";

+-----+
| e_name |
+-----+
| adarsh |
| anvitha |
| adams |
+-----+
3 rows in set (0.00 sec)

mysql>
```