```
mysql> desc project;
 Field
                 Type
                               | Null | Key | Default | Extra |
 ProjectName
                 varchar(15) YES
                                             NULL
 ProjectNumber
                 int
                                YES
                                             NULL
                 varchar(15)
 ProjectLocation
                                YES
                                             NULL
                 int
                               YES
                                             NULL
 DeptNum
4 rows in set (0.10 sec)
mysql> insert into project values('pa',1,loca,1);
ERROR 1054 (42S22): Unknown column 'loca' in 'field list'
mysql> insert into project values('pa',1,'loca',1);
Query OK, 1 row affected (0.71 sec)
mysql> insert into project values('pb',2,'locb',2);
Query OK, 1 row affected (1.72 sec)
mysql> insert into project values('pc',3,'locc',3);
Query OK, 1 row affected (0.09 sec)
mysql> insert into project values('pd',4,'locd',2);
Query OK, 1 row affected (0.86 sec)
mysql> select * from project;
 ProjectName | ProjectNumber | ProjectLocation | DeptNum |
                           1 loca
                                                      1 |
 pa
                          2 locb
                                                      2
 pb
                          3 locc
                                                      3
 pd
                          4 locd
                                                      2
4 rows in set (0.00 sec)
```

```
mysql> desc department;
                               | Null | Key | Default | Extra
                  Type
 DeptName
                                YES
                   varchar(15)
                                              NULL
 DeptNum
                   int
                                 YES
                                              NULL
 ManagerSSN
                   char(9)
                                 YES
                                              NULL
 ManageStartDate
                 date
                                 YES
                                              NULL
4 rows in set (0.00 sec)
mysql> insert into department values('cse',1,11,'2021-08-21');
Query OK, 1 row affected (0.11 sec)
mysql> insert into department values('it',2,22,'2021-08-20');
Query OK, 1 row affected (0.12 sec)
mysql> insert into department values('bbt',3,33,'2021-08-10');
Query OK, 1 row affected (0.04 sec)
mysql> select * from department;
 DeptName | DeptNum | ManagerSSN | ManageStartDate
 cse
                  1 | 11
                                   2021-08-21
 it
                  2 | 22
                                   2021-08-20
 bbt
                  3 | 33
                                  2021-08-10
3 rows in set (0.00 sec)
```

mysql> select * from employee;

FName							Supervisorssn	
Alok	Sinha		1996-09-16			800000		1
Alok	Sinha	1	1996-09-16	NEPAL	M	800000	10000	1

2 rows in set (0.00 sec)

mysql> insert into employee(FName,MName,LName,SSN,Bod,Address,Sex,Salary,Supervisorssn,DeptNum) values ('Amit', '','Sinha',00002,'1998-02-15','NEPAL','M',900000,11000,2);

Query OK, 1 row affected (1.16 sec)

mysql> insert into employee(FName,MName,LName,SSN,Bod,Address,Sex,Salary,Supervisorssn,DeptNum) values ('Aditya', '','Singh',00003,'1999-02-15','NEPAL','M',900000,12000,3);

Query OK, 1 row affected (0.03 sec)

mysql> insert into employee(FName,MName,LName,SSN,Bod,Address,Sex,Salary,Supervisorssn,DeptNum) values ('Ram', 'Prasad','Mandal',00004,'1999-09-18','MEPAL','M',100000,13006 ,1); Query OK, 1 row affected (0.10 sec)

mysql> select * from employee;

FName	MName	LName	SSN	Bod	Address	Sex	Salary	Supervisorssn	DeptNum
Alok		Sinha	1	1996-09-16	NEPAL	M	800000	10000	1
Alok	İ	Sinha	1	1996-09-16	NEPAL	M	800000	10000	1
Amit		Sinha	2	1998-02-15	NEPAL	M	900000	11000	2
Aditya	İ	Singh	3	1999-02-15	NEPAL	M	900000	12000	3
Ram	Prasad	Mandal	4	1999-09-18	NEPAL	M	100000	13000	1

5 rows in set (0.00 sec)

mysql> desc employee; Field | Null | Key | Default | Extra | Type FName varchar(15) | YES NULL varchar(15) varchar(15) MName YES NULL NULL LName YES YES char(9) SSN NULL Bod date NULL Address varchar(20) NULL Sex char(2) YES NULL Salary NULL Supervisorssn | char(9) NULL DeptNum YES NULL

10 rows in set (0.00 sec)

mysql> insert into employee values('&FName','&MName','&LName','&SSN','&Bod','&Address','&Sex',&Salary,'&Supervisorssn',&DeptNum); 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 '&Salary,'&Supervi

chook 1904 (12000). Tool have all end in your Sqt Syntax, thete the mandal that ton responds to your mySqt server version to the light syntax to use hear abazary, abuper or sorsen', abepter sorsen', abuper or sorsen' abupe

mysql> select * from employee;

FName	MName	LName	SSN	Bod	Address	Sex	Salary	Supervisorssn	DeptNum
Alok		Sinha	1	1996-09-16	NEPAL	М	800000	10000	1
Alok	j	Sinha	1	1996-09-16	NEPAL	М	800000	10000	1

2 rows in set (0.00 sec)

mysql> delete from employee where Sex='1'; Query OK, 0 rows affected (0.03 sec)

```
MySQL 8.0 Command Line Client
4 rows in set (0.00 sec)
mysql> show tables
| Tables_in_practice |
department
employee
project
3 rows in set (0.10 sec)
mysql> desc department;
        | Type | Null | Key | Default | Extra |
Field
4 rows in set (0.52 sec)
mysql> select * from department;
| DeptName | DeptNum | ManagerSSN | ManageStartDate |
      | 1 | 11 | 2021-08-21
| 2 | 22 | 2021-08-20
| 3 | 33 | 2021-08-10
cse
 it
bbt
```

3 rows in set (0.28 sec)

mysql> desc employee; Field Type | Null | Key | Default | Extra | FName varchar(15) | YES NULL varchar(15) varchar(15) MName YES NULL LName YES NULL SSN char(9) YES NULL Bod date NULL YES NULL varchar(20) Address Sex char(2) YES NULL Salary int Supervisorssn char(9) NULL YES NULL DeptNum int YES NULL

10 rows in set (0.00 sec)

mysql> select * from employee;

FName	MName	LName	SSN	Bod	Address	Sex	Salary	Supervisorssn	DeptNum
Alok		Sinha	1	1996-09-16	NEPAL	M	800000	10000	1
Alok	j	Sinha	1	1996-09-16	NEPAL	М	800000	10000	1
Amit	j	Sinha	2	1998-02-15	NEPAL	М	900000	11000	2
Aditya	j	Singh	3	1999-02-15	NEPAL	М	900000	12000	3
Ram	Prasad	Mandal	4	1999-09-18	NEPAL	М	100000	13000	1

5 rows in set (0.04 sec)

Field	Туре	Null	Key	Default	Extra
ProjectName	varchar(15)	YES		NULL	
ProjectNumber	int	YES	j	NULL	
ProjectLocation	varchar(15)	YES		NULL	
DeptNum	int	YES		NULL	

4 rows in set (0.00 sec)

mysql> select * from project;

ProjectName	ProjectNumber	ProjectLocation	DeptNum	
 ра	1	loca	1	
pb	2	locb	2	
pc	3	locc	3	
pd	4	locd	2	

4 rows in set (0.00 sec)

mysql>

```
mysql> select FName,MName,LName,SSN,Supervisorssn from employee;
  FName
             MName
                        LName
                                  SSN
                                           Supervisorssn
  Alok
                        Sinha
                                           10000
  Alok
                        Sinha
                                  1
                                           10000
  Amit
                        Sinha
                                  2
                                           11000
  Aditya
                        Singh
                                  3
                                           12000
                       Mandal
  Ram
             Prasad
                                  4
                                           13000
5 rows in set (0.00 sec)
mysql> select * from employee where Bod='1996-09-16';
                                           | Salary |
                                                   Supervisorssn | DeptNum
 FName | MName | LName | SSN
                                | Address | Sex
                       1996-09-16 | NEPAL
                       1996-09-16 | NEPAL
                                             800000
 Alok
            Sinha
                                       M
                                                   10000
 rows in set (0.00 sec)
mysql> select distinct(Salary) from employee;
  Salary
  800000
  900000
  100000
3 rows in set (0.05 sec)
```

```
mysql> select ManagerSSN,ManageStartDate from department where DeptName='cse';
  ManagerSSN | ManageStartDate
                  2021-08-21
 row in set (0.00 sec)
mysql> select * from employee;
 FName | MName | LName | SSN | Bod
                                        | Address | Sex | Salary | Supervisorssn | DeptNum
                Sinha 1
                              1996-09-16 NEPAL
                                                        800000
                                                                10000
                                                                                   1
 Alok
                Sinha 1
                              1996-09-16 | NEPAL
                                                 M
                                                        800000
                                                                10000
                                                                                   1
 Amit
                Sinha 2
                             1998-02-15 NEPAL
                                                 M
                                                        900000
                                                                11000
                                                                                    2
                             1999-02-15 | NEPAL
 Aditya
                Singh
                       3
                                                 M
                                                        900000
                                                                12000
                                                                                   3
       | Prasad | Mandal | 4
                             1999-09-18 | NEPAL
                                                       100000 | 13000
                                                 M
                                                                                   1
 Ram
 rows in set (0.00 sec)
mysql> update employee set DeptNum=5 where Fname='Ram';
Query OK, 1 row affected (0.60 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> select * from employee;
                                        | Address | Sex | Salary | Supervisorssn | DeptNum
 FName | MName | LName | SSN | Bod
 Alok
                 Sinha 1
                              1996-09-16 | NEPAL
                                                        800000
                                                                10000
 Alok
               Sinha 1
                             1996-09-16 | NEPAL
                                                 M
                                                       800000 | 10000
                                                                                   1
 Amit
               Sinha 2
                             1998-02-15 | NEPAL
                                                        900000
                                                                11000
                                                                                   2
                                                 M
                Singh
                       3
 Aditva
                              1999-02-15 NEPAL
                                                  М
                                                        900000
                                                                12000
                                                                                   3
       | Prasad | Mandal | 4
                                                 M
                                                       100000 | 13000
 Ram
                             1999-09-18 | NEPAL
                                                                                    5
 rows in set (0.00 sec)
mysql> select * from employee;
        MName LName SSN Bod
                                         | Address | Sex | Salary | Supervisorssn | DeptNum
 Alok
                 Sinha 1
                               1996-09-16
                                                         800000
                                                                 10000
                                                                                     1
                                          NEPAL
                                                   M
                              1996-09-16 | NEPAL
                 Sinha 1
                                                                                    1
 Alok
                                                  М
                                                         800000
                                                                 10000
                 Sinha 2
                             1998-02-15
 Amit
                                          NEPAL
                                                  M
                                                         900000
                                                                 11000
                                                                                    2
 Aditva
                Singh
                       3
                              1999-02-15 | NEPAL
                                                                                    3
                                                         900000
                                                                 12000
         Prasad | Mandal | 4
                             1999-09-18 | NEPAL
                                                  M
                                                         100000
                                                                 13000
 rows in set (0.00 sec)
mysql> alter table employee add Phone int;
Query OK, 0 rows affected (1.48 sec)
```

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> update employee set Phone = '987456321' where Fname='Alok';
Query OK, 2 rows affected (0.44 sec)
Rows matched: 2 Changed: 2 Warnings: 0
```

mysql> select * from employee;

FName	MName	LName	SSN	Bod	Address	Sex	Salary	Supervisorssn	DeptNum	Phone
Alok		Sinha	1	1996-09-16	NEPAL	M	800000	10000	1	987456321
Alok	l	Sinha	1	1996-09-16	NEPAL	M	800000	10000	1	987456321
Amit	İ	Sinha	2	1998-02-15	NEPAL	М	900000	11000	2	NULL
Aditya	j	Singh	3	1999-02-15	NEPAL	M	900000	12000	3	NULL
Ram	Prasad	Mandal	4	1999-09-18	NEPAL	M	100000	13000	5	NULL

5 rows in set (0.15 sec)

mysql>

mysql> select * from employee;

FName	MName	LName	SSN	Bod	Address	Sex	Salary	Supervisorssn	DeptNum	Phone
Alok		Sinha	1	1996-09-16	NEPAL	М	800000	10000	1	NULL
Alok		Sinha	1	1996-09-16	NEPAL	М	800000	10000	1	NULL
Amit		Sinha	2	1998-02-15	NEPAL	М	900000	11000	2	NULL
Aditya		Singh	3	1999-02-15	NEPAL	М	900000	12000	3	NULL
Ram	Prasad	Mandal	4	1999-09-18	NEPAL	М	100000	13000	5	NULL

5 rows in set (1.22 sec)

```
nysql> select * from employee;
       | MName | LName | SSN | Bod
                                       | Address | Sex | Salary | Supervisorssn | DeptNum | Phone
 ------
                Sinha | 1
                            | 1996-09-16 | NEPAL
                                                M
                                                      800000 | 10000
                                                                                  1 | 987456321
 Alok
                Sinha | 1
                             | 1996-09-16 | NEPAL
                                                      800000 | 10000
                                                                                  1 987456321
                                                M
                      2
                Sinha
                             | 1998-02-15 | NEPAL
                                                      900000 11000
 Amit
                                                M
                                                                                  2 987456387
 Aditya | Singh | 3
Ram | Prasad | Mandal | 4
 Aditya |
                             1999-02-15 | NEPAL
                                                      900000 | 12000
                                                M
                                                                                  3 987456341
                                                M
                                                      100000 | 13000
                            | 1999-09-18 | NEPAL
                                                                                  5 987456333
 rows in set (0.00 sec)
mysql> alter table employee drop column phone;
Query OK, 0 rows affected (2.84 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> select * from employee;
 FName | MName | LName | SSN | Bod | Address | Sex | Salary | Supervisorssn | DeptNum |
                            | 1996-09-16 | NEPAL
               | Sinha | 1
                                                M
                                                      800000 10000
                                                                                  1 |
                            | 1996-09-16 | NEPAL
| 1998-02-15 | NEPAL
               | Sinha | 1
| Sinha | 2
| Singh | 3
                                                M
                                                      800000 | 10000
                                                                                  1
                                                      900000 | 11000
                                                                                  2
                                                M
                             1999-02-15 | NEPAL
                                                      900000 | 12000
 Aditya
                                                M
                                                                                  3
 Ram | Prasad | Mandal | 4
                            | 1999-09-18 | NEPAL
                                                      100000 | 13000
                                                M
                                                                                  5
5 rows in set (0.00 sec)
mysql> select * from employee;
 FName | MName | LName | SSN | Bod
                                        | Address | Sex | Salary | Supervisorssn | DeptNum | Phone
 Alok
                Sinha 1
                             | 1996-09-16 | NEPAL | M
                                                       800000
                                                                10000
                                                                                  1 987456321
 Alok
                Sinha
                              1996-09-16 | NEPAL
                                                       800000
                                                                10000
                                                                                   1
                                                                                       987456321
                                                 M
                             | 1998-02-15 |
| 1999-02-15
                       2
 Amit
                Sinha
                                         NEPAL
                                                 M
                                                       900000
                                                                11000
                                                                                   2
                                                                                           NULL
                                                        900000
 Aditya
                Singh
                                          NEPAL
                                                                12000
                                                                                    3 |
                                                                                            NULL
       | Prasad | Mandal | 4
                             1999-09-18 | NEPAL
                                                       100000
                                                                                    5 I
 Ram
                                                 M
                                                                13000
                                                                                           NULL
5 rows in set (0.15 sec)
mysql> update employee set Phone = '987456387' where Fname='Amit';
Query OK, 1 row affected (0.07 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update employee set Phone = '987456341' where Fname='Aditya';
Query OK, 1 row affected (0.07 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update employee set Phone = '987456333' where Fname='Ram';
Query OK, 1 row affected (0.22 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> select * from employee;
 FName | MName | LName | SSN | Bod | Address | Sex | Salary | Supervisorssn | DeptNum | Phone
 Alok
                Sinha 1
                             1996-09-16 | NEPAL
                                                       800000
                                                                                       987456321
 Alok
                Sinha 1
                             1996-09-16 | NEPAL
                                                 M
                                                       800000
                                                                10000
                                                                                  1 |
                                                                                       987456321
                                                                                       987456387
                Sinha
                             | 1998-02-15 | NEPAL
                                                       900000
                                                                                   2
 Amit
                                                                11000
                                                 M
 Aditva |
                Singh
                       | 3
                              1999-02-15 | NEPAL
                                                 M
                                                        900000
                                                                12000
                                                                                   3 | 987456341
 Ram | Prasad | Mandal | 4
                             1999-09-18 | NEPAL
                                                                13000
                                                                                    5 987456333
                                                       100000
```

rows in set (0.00 sec)

```
mysql> desc department;
                                     | Null | Key | Default | Extra
  Field
                     Type
                     varchar(15) YES
  DeptName
                                                     NULL
 DeptNum
                      int
                                      YES
                                                     NULL
                     char(9)
 ManagerSSN
                                      YES
                                                     NULL
 ManageStartDate date
                                      YES
                                                     NULL
4 rows in set (0.06 sec)
mysql> alter table department rename dept;
Query OK, 0 rows affected (1.20 sec)
mysql> show tables;
  Tables in practice
  dept
  employee
  project
3 rows in set (0.00 sec)
mysql> create table copydept as (select * from dept);
Query OK, 3 rows affected (0.84 sec)
Records: 3 Duplicates: 0 Warnings: 0
mysql> select * from copydept;
| DeptName | DeptNum | ManagerSSN | ManageStartDate |
                 1 | 11
                                 2021-08-21
                   | 22
 it
                                 2021-08-20
                 2
                 3 | 33
 bbt
                               2021-08-10
3 rows in set (0.00 sec)
mysql> desc copydept;
 Field
                             | Null | Key | Default | Extra
                Type
 DeptName
                varchar(15) YES
                                           NULL
 DeptNum | int
ManagerSSN | char(9)
ManageStartDate | date
                               YES
                                           NULL
                              YES
                                           NULL
                              YES
                                          NULL
4 rows in set (0.21 sec)
```

```
mysql> show tables;
 Tables_in_practice
 copydept
 dept
 employee
 project
4 rows in set (0.07 sec)
mysql> drop table copydept;
Query OK, 0 rows affected (1.42 sec)
mysql> show tables;
 Tables_in_practice
 dept
 employee
 project
3 rows in set (0.00 sec)
```

```
mysql> select * from copydept;
 DeptName | DeptNum | ManagerSSN | ManageStartDate
                 1 | 11
                                2021-08-21
 cse
                 2 22
                                2021-08-20
 it
                 3 | 33
 bbt
                                2021-08-10
3 rows in set (0.00 sec)
mysql> delete from copydept;
Query OK, 3 rows affected (0.11 sec)
mysql> select * from copydept;
Empty set (0.30 sec)
```