

DML

```
mysql> CREATE TABLE emp(eno int primary key,ename varchar(50),designation
varchar(50),salary float,date_of_joining date);
Query OK, 0 rows affected (0.04 sec)
```

```
mysql> DESC emp;
```

Field	Type	Null	Key	Default	Extra
eno	int	NO	PRI	NULL	
ename	varchar(50)	YES		NULL	
designation	varchar(50)	YES		NULL	
salary	float	YES		NULL	
date_of_joining	date	YES		NULL	

5 rows in set (0.00 sec)

1) Add email column in employee table

```
mysql> ALTER TABLE emp ADD COLUMN email varchar(50);
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> DESC emp;
```

Field	Type	Null	Key	Default	Extra
eno	int	NO	PRI	NULL	
ename	varchar(50)	YES		NULL	
designation	varchar(50)	YES		NULL	
salary	float	YES		NULL	
date_of_joining	date	YES		NULL	
email	varchar(50)	YES		NULL	

6 rows in set (0.00 sec)

2) Update all email of employee present in given table

```
mysql> SELECT * FROM emp;
```

eno	ename	designation	salary	date_of_joining	email
1	Mr.Advait	Assistant	54000	2002-03-23	NULL
2	Mr.Ram	Accountant	40000	2001-01-03	NULL
3	Mr.Sham	Developer	15000	2003-11-30	NULL
4	Mr.Raghav	manager	420000	2003-03-01	NULL

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

```
mysql> UPDATE emp SET email='mradvait@gmail.com' where eno=1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> UPDATE emp SET email='ram123@gmail.com' where eno=2;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> UPDATE emp SET email='mrsham3@gmail.com' where eno=3;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> UPDATE emp SET email='mrraghav@gmail.com' where eno=4;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> SELECT * FROM emp;
+----+-----+-----+-----+-----+
| eno | ename   | designation | salary | date_of_joining | email                |
+----+-----+-----+-----+-----+
| 1 | Mr.Advait | Assistant   | 54000 | 2002-03-23      | mradvait@gmail.com |
| 2 | Mr.Ram    | Accountant  | 40000 | 2001-01-03      | ram123@gmail.com   |
| 3 | Mr.Sham   | Developer   | 15000 | 2003-11-30      | mrsham3@gmail.com  |
| 4 | Mr.Raghav | manager     | 420000 | 2003-03-01      | mrraghav@gmail.com |
+----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

3) Increase 5% salary of all employee's

```
mysql> UPDATE emp SET salary=salary+(salary*0.05);
Query OK, 4 rows affected (0.01 sec)
Rows matched: 4  Changed: 4  Warnings: 0
```

```
mysql> SELECT * FROM emp;
+----+-----+-----+-----+-----+
| eno | ename   | designation | salary | date_of_joining | email                |
+----+-----+-----+-----+-----+
| 1 | Mr.Advait | Assistant   | 56700 | 2002-03-23      | mradvait@gmail.com |
| 2 | Mr.Ram    | Accountant  | 42000 | 2001-01-03      | ram123@gmail.com   |
| 3 | Mr.Sham   | Developer   | 15750 | 2003-11-30      | mrsham3@gmail.com  |
| 4 | Mr.Raghav | manager     | 441000 | 2003-03-01      | mrraghav@gmail.com |
+----+-----+-----+-----+-----+
```

4 rows in set (0.00 sec)

4) Update the post of Mr.Raghav to Sr.Manager

```
mysql> UPDATE emp SET designation='Sr Manager' where ename='Mr.Raghav';
```

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> SELECT * FROM emp;
```

eno	ename	designation	salary	date_of_joining	email
1	Mr.Advait	Assistant	56700	2002-03-23	mradvait@gmail.com
2	Mr.Ram	Accountant	42000	2001-01-03	ram123@gmail.com
3	Mr.Sham	Developer	15750	2003-11-30	mrsham3@gmail.com
4	Mr.Raghav	Sr Manager	441000	2003-03-01	mrraghav@gmail.com

4 rows in set (0.00 sec)

5) Update the employee position with 'Sr Assistant Manager' whose previous post is 'Assistant';

```
mysql> UPDATE emp SET designation='Sr. Assistant Manager' where designation='Assistant';
```

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> SELECT * FROM emp;
```

eno	ename	designation	salary	date_of_joining	email
1	Mr.Advait	Sr. Assistant Manager	56700	2002-03-23	mradvait@gmail.com
2	Mr.Ram	Accountant	42000	2001-01-03	ram123@gmail.com
3	Mr.Sham	Developer	15750	2003-11-30	mrsham3@gmail.com
4	Mr.Raghav	Sr Manager	441000	2003-03-01	mrraghav@gmail.com

4 rows in set (0.00 sec)

6) Add city column into employee column

```
mysql> ALTER TABLE emp ADD COLUMN city varchar(50);
```

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> SELECT * FROM emp;
```

eno	ename	designation	salary	date_of_joining	email	city
1	Mr.Advait	Sr. Assistant Manager	56700	2002-03-23	mradvait@gmail.com	NULL

2	Mr.Ram	Accountant	42000	2001-01-03	ram123@gmail.com	NULL
3	Mr.Sham	Developer	15750	2003-11-30	mrsham3@gmail.com	NULL
4	Mr.Raghav	Sr Manager	441000	2003-03-01	mrraghav@gmail.com	NULL

4 rows in set (0.00 sec)

7) Update city column

mysql> UPDATE emp SET city='Pune' where eno=1;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE emp SET city='Mumbai',ename='Mr.Roy' where eno=3;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE emp SET city='Solapur',designation='CEO' where eno=2;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE emp SET city='Satara' where eno=4;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT * FROM emp;

eno	ename	designation	salary	date_of_joining	email	city
1	Mr.Advait	Sr. Assistant Manager	56700	2002-03-23	mradvait@gmail.com	Pune
2	Mr.Ram	CEO	42000	2001-01-03	ram123@gmail.com	Solapur
3	Mr.Roy	Developer	15750	2003-11-30	mrsham3@gmail.com	Mumbai
4	Mr.Raghav	Sr Manager	441000	2003-03-01	mrraghav@gmail.com	Satara

4 rows in set (0.00 sec)

8) Update record of city of 'Mr.Advait' because he is shifted from pune to mumbai

mysql> UPDATE emp SET city='Mumbai' where ename='Mr.Advait';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT * FROM emp;

eno	ename	designation	salary	date_of_joining	email	city
1	Mr.Advait	Sr. Assistant Manager	56700	2002-03-23	mradvait@gmail.com	Mumbai
2	Mr.Ram	CEO	42000	2001-01-03	ram123@gmail.com	Solapur
3	Mr.Roy	Developer	15750	2003-11-30	mrsham3@gmail.com	Mumbai
4	Mr.Raghav	Sr Manager	441000	2003-03-01	mrraghav@gmail.com	Satara

```

+----+-----+-----+-----+-----+-----+
| 1 | Mr.Advait | Sr. Assistant Manager | 56700 | 2002-03-23 | mradvait@gmail.com | Mumbai |
| 2 | Mr.Ram | CEO | 42000 | 2001-01-03 | ram123@gmail.com | Solapur |
| 3 | Mr.Roy | Developer | 15750 | 2003-11-30 | mrsham3@gmail.com | Mumbai |
| 4 | Mr.Raghav | Sr Manager | 441000 | 2003-03-01 | mrraghav@gmail.com | Satara |
+----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

```

9) Decrease 5% salary of employee having designation CEO and live in pune

```

mysql> UPDATE emp SET salary=salary-(salary*0.05) where designation='CEO' and
city='pune';
Query OK, 0 rows affected (0.01 sec)
Rows matched: 0 Changed: 0 Warnings: 0

```

10) Add column Phone_No into emp table with data type int

```

mysql> ALTER TABLE emp ADD COLUMN phone_no int;
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0

```

```

mysql> SELECT * FROM emp;
+----+-----+-----+-----+-----+-----+-----+
| eno | ename | designation | salary | date_of_joining | email | city | phone_no |
+----+-----+-----+-----+-----+-----+-----+
| 1 | Mr.Advait | Sr. Assistant Manager | 56700 | 2002-03-23 | mradvait@gmail.com | Mumbai | NULL |
| 2 | Mr.Ram | CEO | 42000 | 2001-01-03 | ram123@gmail.com | Solapur | NULL |
| 3 | Mr.Roy | Developer | 15750 | 2003-11-30 | mrsham3@gmail.com | Mumbai | NULL |
| 4 | Mr.Raghav | Sr Manager | 441000 | 2003-03-01 | mrraghav@gmail.com | Satara | NULL |
+----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

```

11) Update date_of_joining of employee to '15/06/2019' whose name is "Mr.Roy" and belong to mumbai city

```

mysql> UPDATE emp SET date_of_joining='2019-06-15' WHERE ename='Mr.Roy' and
city='Mumbai';
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

```

```
mysql> SELECT * FROM emp;
```

eno	ename	designation	salary	date_of_joining	email	city	phone_no
1	Mr.Advait	Sr. Assistant Manager	56700	2002-03-23	mradvait@gmail.com	Mumbai	NULL
2	Mr.Ram	CEO	42000	2001-01-03	ram123@gmail.com	Solapur	NULL
3	Mr.Roy	Developer	15750	2019-06-15	mrsham3@gmail.com	Mumbai	NULL
4	Mr.Raghav	Sr Manager	441000	2003-03-01	mrraghav@gmail.com	Satara	NULL

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

12) Change Date of joining of employee 'olddate' to 'new date'.

```
mysql> UPDATE emp SET date_of_joining='2020-07-12';
```

```
Query OK, 4 rows affected (0.01 sec)
```

```
Rows matched: 4 Changed: 4 Warnings: 0
```

```
mysql> SELECT * FROM emp;
```

eno	ename	designation	salary	date_of_joining	email	city	phone_no
1	Mr.Advait	Sr. Assistant Manager	56700	2020-07-12	mradvait@gmail.com	Mumbai	NULL
2	Mr.Ram	CEO	42000	2020-07-12	ram123@gmail.com	Solapur	NULL
3	Mr.Roy	Developer	15750	2020-07-12	mrsham3@gmail.com	Mumbai	NULL
4	Mr.Raghav	Sr Manager	441000	2020-07-12	mrraghav@gmail.com	Satara	NULL

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

Delete

1) All record are deleted

```
DELETE FROM emp;
```

2) Delete specific record

```
DELETE FROM emp WHERE rollno=101;
```

Select

1) Display all details of employee whose name is Mr.Roy

```
mysql> SELECT * FROM emp WHERE ename='Mr.Roy';
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
| eno | ename | designation | salary | date_of_joining | email | city | phone_no |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 3 | Mr.Roy | Developer | 15750 | 2020-07-12 | mrsham3@gmail.com | Mumbai | NULL |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

2) Display salary and designation of employee whose id is 4

```
mysql> SELECT salary,designation FROM emp WHERE eno=4;
```

```
+-----+-----+
| salary | designation |
+-----+-----+
| 441000 | Sr Manager |
+-----+-----+
1 row in set (0.00 sec)
```

3) Display the details of employee whose designation is 'ceo'

```
mysql> SELECT * FROM emp WHERE designation='ceo';
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
| eno | ename | designation | salary | date_of_joining | email | city | phone_no |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 2 | Mr.Ram | CEO | 42000 | 2020-07-12 | ram123@gmail.com | Solapur | NULL |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

4) Display dateofjoining of employee whose id=1

```
mysql> SELECT date_of_joining FROM emp WHERE eno=1;
```

```
+-----+
| date_of_joining |
+-----+
| 2020-07-12 |
+-----+
1 row in set (0.00 sec)
```

Relational Operator(>,<,>=,<=,=,<>)

1) Display the details of employee whose salary is greater than 5000

```
mysql> SELECT * FROM emp WHERE salary>5000;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
| eno | ename | designation | salary | date_of_joining | email | city | phone_no |
+-----+-----+-----+-----+-----+-----+-----+-----+
|
```

```

+----+-----+-----+-----+-----+-----+-----+
| 1 | Mr.Advait | Sr. Assistant Manager | 56700 | 2020-07-12 | mradvait@gmail.com | Mumbai | NULL |
| 2 | Mr.Ram | CEO | 42000 | 2020-07-12 | ram123@gmail.com | Solapur | NULL |
| 3 | Mr.Roy | Developer | 15750 | 2020-07-12 | mrsham3@gmail.com | Mumbai | NULL |
| 4 | Mr.Raghav | Sr Manager | 441000 | 2020-07-12 | mrraghav@gmail.com | Satara | NULL |
+----+-----+-----+-----+-----+-----+-----+

```

4 rows in set (0.00 sec)

2) Display the details of employee whose salary is greater than equal to 5000

```
mysql> SELECT * FROM emp WHERE salary>=5000;
```

```

+----+-----+-----+-----+-----+-----+-----+
| eno | ename | designation | salary | date_of_joining | email | city | phone_no |
+----+-----+-----+-----+-----+-----+-----+
| 1 | Mr.Advait | Sr. Assistant Manager | 56700 | 2020-07-12 | mradvait@gmail.com | Mumbai | NULL |
| 2 | Mr.Ram | CEO | 42000 | 2020-07-12 | ram123@gmail.com | Solapur | NULL |
| 3 | Mr.Roy | Developer | 15750 | 2020-07-12 | mrsham3@gmail.com | Mumbai | NULL |
| 4 | Mr.Raghav | Sr Manager | 441000 | 2020-07-12 | mrraghav@gmail.com | Satara | NULL |
+----+-----+-----+-----+-----+-----+-----+

```

4 rows in set (0.00 sec)

3) Display the details of employee whose salary is less than equal to 5000

```
mysql> SELECT * FROM emp WHERE salary<=5000;
```

Empty set (0.00 sec)

4) Display the details of employee whose salary is less than 5000

```
mysql> SELECT * FROM emp WHERE salary<5000;
```

Empty set (0.00 sec)

5) Display the details of employee whose salary is equal to 5000

```
mysql> SELECT * FROM emp WHERE salary=5000;
```

Empty set (0.00 sec)

6) Display the details of employee whose salary is not equal 5000

```
mysql> SELECT * FROM emp WHERE salary<>5000;
```

```

+----+-----+-----+-----+-----+-----+-----+

```


eno	ename	designation	salary	date_of_joining	email	city	phone_no
1	Mr.Advait	Sr. Assistant Manager	56700	2020-07-12	mradvait@gmail.com	Mumbai	NULL
2	Mr.Ram	CEO	42000	2020-07-12	ram123@gmail.com	Solapur	NULL
3	Mr.Roy	Developer	15750	2020-07-12	mrsham3@gmail.com	Mumbai	NULL
4	Mr.Raghav	Sr Manager	441000	2020-07-12	mrraghav@gmail.com	Satara	NULL

4 rows in set (0.00 sec)