

```
create table student(stuid int,stuname varchar(20),dept varchar(20));
```

```
mysql> create table stu(stuid int,stuname varchar(20),dept varchar(20));  
Query OK, 0 rows affected (0.38 sec)
```

```
mysql> insert into student values(5,'sara','cse');  
Query OK, 1 row affected (0.17 sec)
```

```
mysql> insert into student values(6,'dharsh','cse');  
Query OK, 1 row affected (0.16 sec)
```

```
mysql> insert into student values(1,'dharsh','cse');  
Query OK, 1 row affected (0.25 sec)
```

```
mysql> insert into student values(7,'nandh','cse');  
Query OK, 1 row affected (0.08 sec)
```

```
mysql> select*from student;
```

```
+-----+-----+-----+  
| stuid | stuname | dept |  
+-----+-----+-----+  
|      5 | sara    | cse  |  
|      6 | dharsh  | cse  |  
|      1 | dharsh  | cse  |  
|      7 | nandh   | cse  |  
+-----+-----+-----+  
4 rows in set (0.01 sec)
```

```
mysql> insert into stu values(1,'dhar','cse');  
Query OK, 1 row affected (0.15 sec)
```

```
mysql> insert into stu values(2,'vishl','cse');  
Query OK, 1 row affected (0.07 sec)
```

```
mysql> insert into stu values(3,'nivi','cse');  
Query OK, 1 row affected (0.04 sec)
```

```
mysql> insert into stu values(8,'xyz',null);  
Query OK, 1 row affected (0.10 sec)
```

```
mysql> select*from stu;
```

```
+-----+-----+-----+  
| stuid | stuname | dept |  
+-----+-----+-----+  
|      1 | dhar    | cse  |  
|      2 | vishl   | cse  |  
|      3 | nivi    | cse  |  
|      8 | xyz     | NULL |  
+-----+-----+-----+  
4 rows in set (0.00 sec)
```

```
mysql> INSERT INTO stu (stuid, stuname, dept)
-> SELECT stuid, stuname, dept
-> FROM student
-> WHERE dept = 'cse';
```

Query OK, 4 rows affected (0.14 sec)  
Records: 4 Duplicates: 0 Warnings: 0

```
mysql> select*from stu;
```

stuid	stuname	dept
1	dhar	cse
2	vishl	cse
3	nivi	cse
8	xyz	NULL
5	sara	cse
6	dharsh	cse
1	dharsh	cse
7	nandh	cse

8 rows in set (0.00 sec)

```
mysql> UPDATE stu
-> SET dept = 'ece'
-> WHERE stuname IN (SELECT stuname FROM student WHERE stuid = 7);
```

Query OK, 1 row affected (0.12 sec)  
Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> select*from stu;
```

stuid	stuname	dept
1	dhar	cse
2	vishl	cse
3	nivi	cse
8	xyz	NULL
5	sara	cse
6	dharsh	cse
1	dharsh	cse
7	nandh	ece

8 rows in set (0.00 sec)

```
mysql> create table book(isbn int,title varchar(20),pubyear int(10),unitprice
int(10),authorname varchar(20),publisher varchar(20));
```

Query OK, 0 rows affected, 2 warnings (0.29 sec)

```
mysql> insert into book values(1001,'cn',1997,450,'vishal','dharsh');
```

Query OK, 1 row affected (0.07 sec)

```
mysql> insert into book values(1002,'os',1928,750,'nivi','var');
Query OK, 1 row affected (0.13 sec)
```

```
mysql> insert into book values(1003,'dp',1990,500,'nand','lak');
Query OK, 1 row affected (0.38 sec)
```

```
mysql> insert into book values(1004,'es',1978,400,'saran','sudha');
Query OK, 1 row affected (0.15 sec)
```

```
mysql> select *from book;
```

isbn	title	pubyear	unitprice	authorname	publisher
1001	cn	1997	450	vishal	dharsh
NULL	NULL	NULL	NULL	NULL	NULL
NULL	NULL	NULL	NULL	NULL	NULL
1002	os	1928	750	nivi	var
1003	dp	1990	500	nand	lak
1004	es	1978	400	saran	sudha

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

suppose enter null value delete?

```
DELETE FROM book WHERE isbn IS NULL;
```

```
mysql> select*from book;
```

isbn	title	pubyear	unitprice	authorname	publisher
1001	cn	1997	450	vishal	dharsh
1002	os	1928	750	nivi	var
1003	dp	1990	500	nand	lak
1004	es	1978	400	saran	sudha

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

```
mysql> UPDATE book
```

```
    -> SET unitprice = 500
```

```
    -> WHERE unitprice = (SELECT MAX(unitprice) FROM (SELECT unitprice FROM book) AS temp);
```

```
Query OK, 1 row affected (0.35 sec)
```

```
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select*from book;
```

isbn	title	pubyear	unitprice	authorname	publisher
1001	cn	1997	450	vishal	dharsh
1002	os	1928	500	nivi	var

1003	dp	1990	500	nand	lak
1004	es	1978	400	saran	sudha

4 rows in set (0.00 sec)

```
mysql> insert into book values(1005,'daa',1990,700,'san','roja');
Query OK, 1 row affected (0.18 sec)
```

```
mysql> select*from book;
```

isbn	title	pubyear	unitprice	authorname	publisher
1001	cn	1997	450	vishal	dhmarsh
1002	os	1928	500	nivi	var
1003	dp	1990	500	nand	lak
1004	es	1978	400	saran	sudha
1005	daa	1990	700	san	roja

5 rows in set (0.00 sec)

```
mysql> UPDATE book
-> SET unitprice = 500
-> WHERE unitprice > (SELECT AVG_price FROM (SELECT AVG(unitprice) AS AVG_price
FROM book) AS temp);
Query OK, 1 row affected (0.07 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select*from book;
```

isbn	title	pubyear	unitprice	authorname	publisher
1001	cn	1997	450	vishal	dhmarsh
1002	os	1928	500	nivi	var
1003	dp	1990	500	nand	lak
1004	es	1978	400	saran	sudha
1005	daa	1990	500	san	roja

5 rows in set (0.00 sec)

```
mysql> create table author(authorname varchar(15),country varchar(20));
Query OK, 0 rows affected (2.63 sec)
```

```
mysql> insert into author values('nivi','india');
Query OK, 1 row affected (0.20 sec)
```

```
mysql> insert into author values('nandh','us');
Query OK, 1 row affected (0.12 sec)
```

```
mysql> insert into author values('saran','canada');
```

Query OK, 1 row affected (0.13 sec)

```
mysql> select*from author;
```

authorname	country
vishal	india
nivi	india
nandh	us
saran	canada

4 rows in set (0.00 sec)

```
mysql> DELETE FROM book
```

```
-> WHERE authorname IN (SELECT authorname FROM author WHERE country = 'canada');
```

Query OK, 1 row affected (0.20 sec)

```
mysql> select*from book;
```

isbn	title	pubyear	unitprice	authorname	publisher
1001	cn	1997	450	vishal	dharsh
1002	os	1928	500	nivi	var
1003	dp	1990	500	nand	lak
1005	daa	1990	500	san	roja

4 rows in set (0.00 sec)

```
mysql> DELETE FROM book
```

```
-> WHERE unitprice = (SELECT MIN(unitprice) FROM (SELECT unitprice FROM book) AS temp);
```

Query OK, 1 row affected (0.20 sec)

```
mysql> select *from book;
```

isbn	title	pubyear	unitprice	authorname	publisher
1002	os	1928	500	nivi	var
1003	dp	1990	500	nand	lak
1005	daa	1990	500	san	roja

3 rows in set (0.00 sec)

```
mysql> DELETE FROM book
```

```
-> WHERE title IN (SELECT title FROM (SELECT title FROM book WHERE title='os') AS temp);
```

Query OK, 1 row affected (0.12 sec)

```
mysql> select*from book;
```

isbn	title	pubyear	unitprice	authorname	publisher
------	-------	---------	-----------	------------	-----------

isbn	title	pubyear	unitprice	authorname	publisher
1003	dp	1990	500	nand	lak
1005	daa	1990	500	san	roja

2 rows in set (0.00 sec)

```
mysql> SELECT title, authorname, publisher
-> FROM book
-> WHERE pubyear = 1990;
```

title	authorname	publisher
dp	nand	lak
daa	san	roja

2 rows in set (0.00 sec)

```
mysql> select*from book where authorname IN(select authorname from book where
pubyear=1990);
```

isbn	title	pubyear	unitprice	authorname	publisher
1003	dp	1990	500	nand	lak
1005	daa	1990	500	san	roja

2 rows in set (0.00 sec)

```
mysql> SELECT title
-> FROM book
-> WHERE authorname NOT IN (SELECT authorname FROM author WHERE country =
'india');
```

title
dp
daa

2 rows in set (0.00 sec)

```
mysql> create table book1(isbn int,title varchar(20),pubyear int,unitprice
int,authornamr varchar(20),pblisher varchar(20));
Query OK, 0 rows affected (1.49 sec)
```

```
mysql> insert into book1 values(1001,'cn',1997,450,'vishal','dharsh');
Query OK, 1 row affected (0.35 sec)
```

```
mysql> insert into book1 values(1002,'os',1989,500,'nivi','varsh');
Query OK, 1 row affected (0.12 sec)
```

```
mysql> insert into book1 values(1003,'dp',1990,500,'nand','laksh');
Query OK, 1 row affected (0.11 sec)
```

```
mysql> insert into book1 values(1004,'es',1978,400,'saran','sudha');
Query OK, 1 row affected (0.13 sec)
```

```
mysql> select*from book1;
```

isbn	title	pubyear	unitprice	authornamr	pblisher
1001	cn	1997	450	vishal	dharsh
1002	os	1989	500	nivi	varsh
1003	dp	1990	500	nand	laksh
1004	es	1978	400	saran	sudha

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

```
mysql> SELECT DISTINCT title
```

```
-> FROM book1
```

```
-> WHERE unitprice > SOME (SELECT unitprice FROM book1 WHERE pubyear = 1978);
```

title
cn
os
dp

```
3 rows in set (0.10 sec)
```

```
mysql> select distinct title from book1 where unitprice>all(select unitprice from
book1 where pubyear=1978);
```

title
cn
os
dp

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

```
mysql> SELECT authornamr
```

```
-> FROM book1
```

```
-> GROUP BY authornamr
```

```
-> HAVING (SUM(unitprice) * 0.15) >= ALL (SELECT SUM(unitprice * 0.15) FROM book
GROUP BY authornamr);
```

authornamr
nivi
nand

```

+-----+
2 rows in set (0.06 sec)
mysql> create table student1(stuid int,stuname varchar(20),dept varchar(20),age
int,total int);
Query OK, 0 rows affected (1.94 sec)

```

```

mysql> insert into student1 values(1,'preethi','cse',18,450);
Query OK, 1 row affected (0.22 sec)

```

```

mysql> insert into student1 values(2,'riya','cse',19,430);
Query OK, 1 row affected (0.19 sec)

```

```

mysql> insert into student1 values(3,'meena','it',19,380);
Query OK, 1 row affected (0.13 sec)

```

```

mysql> insert into student1 values(4,'john','cse',19,480);
Query OK, 1 row affected (0.05 sec)

```

```

mysql> select*from student1;

```

```

+-----+-----+-----+-----+-----+
| stuid | stuname | dept | age | total |
+-----+-----+-----+-----+-----+
| 1 | preethi | cse | 18 | 450 |
| 2 | riya | cse | 19 | 430 |
| 3 | meena | it | 19 | 380 |
| 4 | john | cse | 19 | 480 |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

```

```

mysql> create table student2(stuid int,stuname varchar(20),dept varchar(20),age
int,total int);
Query OK, 0 rows affected (0.30 sec)

```

```

mysql> insert into student2 values(1,'preethi','cse',18,450);
Query OK, 1 row affected (0.18 sec)

```

```

mysql> insert into student2 values(3,'meena','it',19,380);
Query OK, 1 row affected (0.15 sec)

```

```

mysql> insert into student2 values(5,'rosy','cse',20,480);
Query OK, 1 row affected (0.17 sec)

```

```

mysql> select*from student2;

```

```

+-----+-----+-----+-----+-----+
| stuid | stuname | dept | age | total |
+-----+-----+-----+-----+-----+
| 1 | preethi | cse | 18 | 450 |
| 3 | meena | it | 19 | 380 |
| 5 | rosy | cse | 20 | 480 |
+-----+-----+-----+-----+-----+

```



3 rows in set (0.00 sec)

```
mysql> SELECT stuname
-> FROM student1
-> WHERE EXISTS (SELECT 1 FROM student2 WHERE student1.stuid = student2.stuid);
```

stuname
preethi
meena

2 rows in set (0.00 sec)

```
mysql> SELECT stuname
-> FROM student1
-> WHERE NOT EXISTS (SELECT 1 FROM student2 WHERE student1.stuid =
student2.stuid);
```

stuname
riya
john

2 rows in set (0.00 sec)

```
mysql> SELECT student1.stuid, student1.stuname, student1.age
-> FROM student1, student2
-> WHERE student1.stuid = student2.stuid;
```

stuid	stuname	age
1	preethi	18
3	meena	19

2 rows in set (0.00 sec)

```
mysql> SELECT student1.stuid, student1.stuname, student1.dept
-> FROM student1, student2
-> WHERE student1.stuid = student2.stuid
-> AND student1.dept = 'cse'
-> AND student2.dept = 'cse';
```

stuid	stuname	dept
1	preethi	cse

1 row in set (0.23 sec)

```
mysql> SELECT student1.stuid, student1.stuname, student1.dept
-> FROM student1, student2
```

```

-> WHERE student1.stuid <> student2.stuid
->   AND student1.dept = 'cse'
->   AND student2.dept = 'cse';

```

stuid	stuname	dept
1	preethi	cse
2	riya	cse
2	riya	cse
4	john	cse
4	john	cse

5 rows in set (0.01 sec)

```

mysql> SELECT a.stuid, a.dept
-> FROM student1 a, student2 b
-> WHERE a.stuid = b.stuid AND a.total > 400;

```

stuid	dept
1	cse

1 row in set (0.00 sec)

```

mysql> select a.stuname,b.stuid from student1 a,student1 b where(a.dept=b.dept)and
a.dept='cse';

```

stuname	stuid
john	1
riya	1
preethi	1
john	2
riya	2
preethi	2
john	4
riya	4
preethi	4

9 rows in set (0.00 sec)

```

mysql> select distinct a.stuname,b.stuid from student1 a,student1 b
where(a.stuid=b.stuid and a.total>460);

```

stuname	stuid
john	4

1 row in set (0.18 sec)

```
mysql> select distinct a.stuname,b.stuid from student1 a,student1 b
where(a.stuid=b.stuid);
```

```
+-----+-----+
| stuname | stuid |
+-----+-----+
| preethi | 1 |
| riya    | 2 |
| meena   | 3 |
| john    | 4 |
+-----+-----+
```

4 rows in set (0.01 sec)

```
mysql> select student1.stuid,student1.stuname from student1 inner join student2 on
student1.stuid=student2.stuid;
```

```
+-----+-----+
| stuid | stuname |
+-----+-----+
| 1 | preethi |
| 3 | meena   |
+-----+-----+
```

2 rows in set (0.10 sec)

```
mysql> select*from student1 inner join student2 on student1.stuid=student2.stuid;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| stuid | stuname | dept | age | total | stuid | stuname | dept | age | total |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | preethi | cse | 18 | 450 | 1 | preethi | cse | 18 | 450 |
| 3 | meena   | it  | 19 | 380 | 3 | meena   | it  | 19 | 380 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

2 rows in set (0.00 sec)

```
mysql> select student1.age from student1 inner join student2 on
student1.stuid=student2.stuid;
```

```
+-----+
| age |
+-----+
| 18 |
| 19 |
+-----+
```

2 rows in set (0.00 sec)

```
mysql> SELECT student1.stuid, student1.stuname, student1.age
-> FROM student1
-> LEFT OUTER JOIN student2 ON student1.stuid = student2.stuid;
```

```
+-----+-----+-----+
| stuid | stuname | age |
+-----+-----+-----+
| 1 | preethi | 18 |
| 2 | riya    | 19 |
| 3 | meena   | 19 |
+-----+-----+-----+
```

stuid	stuname	age
4	john	19

4 rows in set (0.00 sec)

```
mysql> select student1.stuid,student1.stuname,student1.age from student1 right outer
join student2 on student1.stuid=student2.stuid;
```

stuid	stuname	age
1	preethi	18
3	meena	19
NULL	NULL	NULL

3 rows in set (0.00 sec)

```
mysql> SELECT student1.stuid, student1.stuname, student1.age
-> FROM student1
-> LEFT OUTER JOIN student2 ON student1.stuid = student2.stuid
->
-> UNION
->
-> SELECT student2.stuid, student2.stuname, student2.age
-> FROM student2
-> LEFT OUTER JOIN student1 ON student1.stuid = student2.stuid
-> WHERE student1.stuid IS NULL;
```

stuid	stuname	age
1	preethi	18
2	riya	19
3	meena	19
4	john	19
5	rosy	20

5 rows in set (0.18 sec)