

```
mysql> create table products (id integer primary key,productName
char(20) ,supplierId integer, unit char(20),price real);
Query OK, 0 rows affected (0.08 sec)
```

```
mysql> insert into products values(1,'chais',1,10 'boxes*20 boxes',
18);
```

```
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 ''boxes*20 boxes',18)'' at line 1
```

```
mysql> insert into products values(1,'chais',1,'10 boxes*20 boxes',
18);
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into products values(2,'chang',1,'24*12 boxes*20 boxes',
18);
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into products values(2,'chang',1,'24*12 boxes*20 boxes',
18);
```

```
ERROR 1062 (23000): Duplicate entry '2' for key 'PRIMARY'
```

```
mysql> drop table products;
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> create table products (id integer primary key,productName
varchar(20) ,supplierId integer, unit varchar(20),price real);
```

```
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> insert into products values(1,'chais',1,'10 boxes*20 bags',18);
```

```
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into products values(2,'chang',1,'24-12 oz bottles',19);
```

```
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into products values(3,'aniseed syrup',1,'12-550 ml
bottl
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select *from products;
```

id	productName	supplierId	unit	price
1	chais	1	10 boxes*20 bags	18
2	chang	1	24-12 oz bottles	19
3	aniseed syrup	1	12-550 ml bottles	10

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

```
mysql> insert into products values(4,'chef anton',2,'48-6 oz jars',22);
```

```
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into products values(5,'chef Gumbo',2,'36 boxes',21.35);
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select *from products;
```

```
+-----+
+-----+-----+-----+-----+
| id | productName | supplierId | unit | price |
+-----+-----+-----+-----+
| 1 | chais | 1 | 10 boxes*20 bags | 18 |
| 2 | chang | 1 | 24-12 oz bottles | 19 |
| 3 | aniseed syrup | 1 | 12-550 ml bottles | 10 |
| 4 | chef anton | 2 | 48-6 oz jars | 22 |
| 5 | chef Gumbo | 2 | 36 boxes | 21.35 |
+-----+-----+-----+-----+
```

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

```
mysql> select productName from products where price operator any
(select price fromsupplierId where id=5);
```

```
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 'operator any (select price fromsupplierId where
id=5)' at line 1
```

```
mysql> SELECT productName from products where supplierId operator ANY
(SELECT price from products where id=5);
```

```
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 'operator ANY (SELECT price from products where
id=5)' at line 1
```

```
mysql> alter table products add column OrderDeatilsID integer;
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> mysql> alter table products add column OrderDeatilsID integer;
```

```
ERROR 1060 (42S21): Duplicate column name 'OrderDeatilsID'
```

```
mysql> alter table products add column orderID integer;
```

```
Query OK, 0 rows affected (0.02 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table products add column productID integer;
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table products add column Quantity integer;
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> update products set OrderDeatilsID=1,orderID=10248 where id=1
-> ;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select *from products;
+-----+
+-----+-----+-----+-----+
| id | productName | supplierId | unit | price |
OrderDeatilsID | orderID | productID | Quantity |
+-----+-----+-----+-----+
+-----+-----+-----+-----+
| 1 | chais | 1 | 10 boxes*20 bags | 18 |
1 | 10248 | NULL | NULL |
| 2 | chang | 1 | 24-12 oz bottles | 19 |
NULL | NULL | NULL | NULL |
| 3 | aniseed syrup | 1 | 12-550 ml bottles | 10 |
NULL | NULL | NULL | NULL |
| 4 | chef anton | 2 | 48-6 oz jars | 22 |
NULL | NULL | NULL | NULL |
| 5 | chef Gumbo | 2 | 36 boxes | 21.35 |
NULL | NULL | NULL | NULL |
+-----+-----+-----+-----+
+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> update products set OrderDeatilsID=1,orderID=10248 whermysql> ;
ERROR:
No query specified
```

```
mysql> ;update products set
OrderDeatilsID=2,orderID=10248,productID=2,Quantity=10 where id=2;
ERROR:
No query specified
```

```
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select *from products;
+-----+
+-----+-----+-----+-----+
+-----+-----+-----+-----+
| id | productName | supplierId | unit | price |
OrderDeatilsID | orderID | productID | Quantity |
+-----+-----+-----+-----+
+-----+-----+-----+-----+
| 1 | chais | 1 | 10 boxes*20 bags | 18 |
1 | 10248 | NULL | NULL |
| 2 | chang | 1 | 24-12 oz bottles | 19 |
2 | 10248 | 2 | 10 |
+-----+-----+-----+-----+
```

3	aniseed syrup	1	12-550 ml bottles	10
NULL	NULL	NULL	NULL	
4	chef anton	2	48-6 oz jars	22
NULL	NULL	NULL	NULL	
5	chef Gumbo	2	36 boxes	21.35
NULL	NULL	NULL	NULL	

```

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

```

5 rows in set (0.00 sec)

```
mysql> ;update products set
OrderDeatilsID=3,orderId=10248,productId=3,Quantity=15 where id=3;
ERROR:
No query specified
```

```
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> ;update products set
OrderDeatilsID=4,orderId=10249,productId=1,Quantity=8 where id=4;
ERROR:
No query specified
```

```
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> update products set
OrderDeatilsID=3,orderId=10248,productId=3,Quantity=15 where id=3;
Query OK, 0 rows affected (0.00 sec)
Rows matched: 1  Changed: 0  Warnings: 0
```

```
mysql> update products set
OrderDeatilsID=4,orderId=10249,productId=1,Quantity=8 where id=4;
Query OK, 0 rows affected (0.00 sec)
Rows matched: 1  Changed: 0  Warnings: 0
```

```
mysql> update products set
OrderDeatilsID=5,orderId=10249,productId=4,Quantity=4 where id=5;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select *from products;
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
| id | productName | supplierId | unit | price |
OrderDeatilsID | orderID | productId | Quantity |
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
```

1	chais		1	10 boxes*20 bags	18
1	10248	NULL	NULL		
2	chang		1	24-12 oz bottles	19
2	10248	2	10		
3	aniseed syrup		1	12-550 ml bottles	10
3	10248	3	15		
4	chef anton		2	48-6 oz jars	22
4	10249	1	8		
5	chef Gumbo		2	36 boxes	21.35
5	10249	4	4		

```

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

```

5 rows in set (0.00 sec)

```

mysql> update products set productID=1,Qulity=12 where id=1;
ERROR 1054 (42S22): Unknown column 'Qulity' in 'field list'
mysql> update products set productID=1,Quantity=12 where id=1;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

```

```

mysql> select *from products;

```

id	productName	supplierId	unit	price
1	chais		1	10 boxes*20 bags
1	10248	1	12	
2	chang		1	24-12 oz bottles
2	10248	2	10	
3	aniseed syrup		1	12-550 ml bottles
3	10248	3	15	
4	chef anton		2	48-6 oz jars
4	10249	1	8	
5	chef Gumbo		2	36 boxes
5	10249	4	4	

```

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

```

5 rows in set (0.00 sec)

```

e Quantity = 4 or Quantity = 12);
Empty set (0.01 sec)

```

```

mysql> mysql> select all productName from products where true;
+-----+
| fromme |

```

chais
chang
aniseed syrup
chef anton
chef Gumbo

5 rows in set (0.01 sec)

```
mysql> select productName from products where productID = ALL (SELECT
productID FROM products WHERE Quantity=4);
```

productName
chef Gumbo

1 row in set (0.00 sec)

```
mysql> select productName from products where productID = ALL (SELECT
productID FROM products GROUP BY orderID);
Empty set (0.00 sec)
```

```
mysql> select productName FROM products where productID = ANY (SELECT
productID FROM products WHERE Quantity = 12);
```

productName
chais
chef anton

2 rows in set (0.00 sec)

```
mysql> select productName FROM products where productID = SOME (SELECT
productID FROM products WHERE Quantity = 12);
```

productName
chais
chef anton

2 rows in set (0.00 sec)

```
mysql> select productName from products where price > some(select
price from products where orderID= 10248);
```

productName
chais
chang

chef anton
chef Gumbo

4 rows in set (0.00 sec)

```
mysql> select * from products where productName in ('chais','chang');
```

id	productName	supplierId	unit	price
OrderDeatilsID	orderID	productID	Quantity	
1	chais	1	10 boxes*20 bags	18
1	10248	1	12	
2	chang	1	24-12 oz bottles	19
2	10248	2	10	

2 rows in set (0.00 sec)

```
mysql> select * from products where productName not in ('chais','chang');
```

id	productName	supplierId	unit	price
OrderDeatilsID	orderID	productID	Quantity	
3	aniseed syrup	1	12-550 ml bottles	10
3	10248	3	15	
4	chef anton	2	48-6 oz jars	22
4	10249	1	8	
5	chef Gumbo	2	36 boxes	21.35
5	10249	4	4	

3 rows in set (0.00 sec)

```
mysql> select productName from products where exists (select price from products where orderID= 10248);
```

productName
chais
chang
aniseed syrup
chef anton
chef Gumbo

5 rows in set (0.00 sec)

```
mysql> select productName from products where not exists (select price
from products where orderID= 10248);
Empty set (0.00 sec)
```

```
mysql> select productName from products where not exists (select price
from products where orderID>1000);
Empty set (0.00 sec)
```

```
mysql> select productName from products where NOT EXISTS (select
productName from products where orderID= 10248);
Empty set (0.00 sec)
```

```
mysql> distinct productName from products;
```

productName
chais
chang
aniseed syrup
chef anton
chef Gumbo

5 rows in set (0.00 sec)

```
mysql> select count(distinct productName) from products;
```

count(distinct productName)
5

1 row in set (0.01 sec)

```
mysql> SELECT Count(*) AS DistinctProductNames FROM (SELECT DISTINCT
productName FROM products);
```

```
mysql> CREATE TABLE PERSONS (ID INT NOT NULL, LASTNAME VARCHAR(225)
NOT NULL, FIRSTNAME VARCHAR(225), AGE INT, UNIQUE (ID));
ERROR 1050 (42S01): Table 'persons' already exists
```

```
mysql> CREATE TABLE PERSONS1 (ID INT NOT NULL, LASTNAME VARCHAR(225)
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> CREATE TABLE PERSONS2 (ID INT NOT NULL, LASTNAME VARCHAR(225)
NOT NULL, FIRSTNAME VARCHAR(225), AGE INT, CONSTRAINT UC_PERSON UNIQUE
(ID, LASTNAME));
Query OK, 0 rows affected (0.01 sec)
```



```
mysql> CREATE TABLE PERSONS2 (ID INT NOT NULL, LASTNAME VARCHAR(225)
NOT NULL, FIRSTNAME VARCHAR(225),AGE INT, CONSTRAINT UC_PERSON UNIQUE
mysql> select *from products where NOT EXISTS(select productName from
products where id=1);
Empty set (0.00 sec)
```

```
mysql> select *from products where NOT EXISTS(select productName from
products where id<5);
Empty set (0.00 sec)
```

```
mysql> select * from products where productName not in
('chais','chang')
-> ;
```

```
+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+
| id | productName | supplierId | unit | price |
OrderDeatilsID | orderID | productID | Quantity |
+-----+-----+-----+-----+
+-----+-----+-----+-----+
| 3 | aniseed syrup | 1 | 12-550 ml bottles | 10 |
3 | 10248 | 3 | 15 |
| 4 | chef anton | 2 | 48-6 oz jars | 22 |
4 | 10249 | 1 | 8 |
| 5 | chef Gumbo | 2 | 36 boxes | 21.35 |
5 | 10249 | 4 | 4 |
+-----+-----+-----+-----+
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> insert into order_table values(1);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into order_table values(2);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into order_table values(3);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into order_table values(4
-> );
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into order_table values(5);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> select * from order_table;
+----+
| id |
```

1
2
3
4
5

5 rows in set (0.00 sec)

```
mysql> select id, productName from products as top1 where not exists
(select* from order_table as bot1 where top1.id=bot1.id);
Empty set (0.00 sec)
```

```
mysql> select id, productName from products as top1 where exists
(select* from order_table as bot1 where top1.id=bot1.id);
```

id	productName
1	chais
2	chang
3	aniseed syrup
4	chef anton
5	chef Gumbo

5 rows in set (0.00 sec)

```
mysql> select id, productName from products as top1 where not exists
(select* from order_table as bot1 where top1.id=bot1.id);
Empty set (0.00 sec)
```

```
mysql>
```