

# MySQL 8.0 Command Line Client

```
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| school |
| sys |
+-----+
5 rows in set (0.01 sec)

mysql> create database shop;
Query OK, 1 row affected (0.05 sec)

mysql> use shop;
Database changed
mysql> create table customer(cid int primary key auto_increment,cname varchar(20) not null);
Query OK, 0 rows affected (0.27 sec)

mysql> insert into customer(cname) values('Rashmi');
Query OK, 1 row affected (0.03 sec)

mysql> insert into customer(cname) values('Tanvi');
Query OK, 1 row affected (0.03 sec)

mysql> insert into customer(cname) values('Nandana');
Query OK, 1 row affected (0.02 sec)

mysql> insert into customer(cname) values('Sam');
Query OK, 1 row affected (0.03 sec)

mysql> desc customer;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra          |
+-----+-----+-----+-----+-----+-----+
| cid   | int           | NO   | PRI | NULL    | auto_increment |
| cname | varchar(20)   | NO   |     | NULL    |                |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.01 sec)

mysql> select *from customer;
+-----+-----+
| cid | cname |
+-----+-----+
| 1   | Rashmi |
| 2   | Tanvi |
| 3   | Nandana |
| 4   | Sam |
+-----+-----+
4 rows in set (0.01 sec)

mysql> create table prod(pid int unique,pname varchar(20) primary key);
Query OK, 0 rows affected (0.49 sec)
```

```
mysql> create table prod(pid int unique,pname varchar(20) primary key);
Query OK, 0 rows affected (0.49 sec)
```

```
mysql> insert into prod values(15,'Sanitizer'),(10,'biscuit'),(8,'shirt'),(11,'game');
Query OK, 4 rows affected (0.04 sec)
Records: 4  Duplicates: 0  Warnings: 0
```

```
mysql> rename table prod to product;
Query OK, 0 rows affected (0.17 sec)
```

```
mysql> alter table product add column count int default 0;
Query OK, 0 rows affected (0.22 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> desc product;
```

Field	Type	Null	Key	Default	Extra
pid	int	YES	UNI	NULL	
pname	varchar(20)	NO	PRI	NULL	
count	int	YES		0	

```
3 rows in set (0.01 sec)
```

```
mysql> select *from product;
```

pid	pname	count
10	biscuit	0
11	game	0
15	Sanitizer	0
8	shirt	0

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

```
mysql> update product set count=50 where pid=10;  
Query OK, 1 row affected (0.01 sec)  
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> update product set count=20 where pid=11;  
Query OK, 1 row affected (0.01 sec)  
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> update product set count=80 where pid=15;  
Query OK, 1 row affected (0.01 sec)  
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> update product set count=30 where pid=18;  
Query OK, 0 rows affected (0.00 sec)  
Rows matched: 0  Changed: 0  Warnings: 0
```

```
mysql> update product set count=30 where pid=8;  
Query OK, 1 row affected (0.01 sec)  
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> select *from product;
```

```
+-----+-----+-----+  
| pid  | pname    | count |  
+-----+-----+-----+  
| 10   | biscuit  | 50    |  
| 11   | game     | 20    |  
| 15   | Sanitizer| 80    |  
| 8    | shirt    | 30    |  
+-----+-----+-----+
```

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



MySQL 8.0 Command Line Client

```
mysql> create table bill(oid int primary key,cusid int,prod varchar(20),price int,check(oid<200));
Query OK, 0 rows affected (0.42 sec)

mysql> alter table bill add constraint fk_order foreign key(cusid) references customer(cid) on delete cascade;
Query OK, 0 rows affected (0.99 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table bill add constraint fk_op foreign key(prod) references product(pname) on delete set null on update set null;
Query OK, 0 rows affected (0.93 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> insert into bill values(201,2,biscuit,30);
ERROR 1054 (42S22): Unknown column 'biscuit' in 'field list'
mysql> insert into bill values(201,2,'biscuit',30);
ERROR 3819 (HY000): Check constraint 'bill_chk_1' is violated.
mysql> insert into bill values(80,2,'biscuit',30);
Query OK, 1 row affected (0.06 sec)

mysql> insert into bill values(60,1,'biscuit',30);
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into bill values(134,4,'Sanitizer',80);
Query OK, 1 row affected (0.02 sec)

mysql> truncate bill;
Query OK, 0 rows affected (0.55 sec)

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

mysql> insert into bill values(50,1,'game',50),(76,3,'shirt',100),(134,4,'Sanitizer',80),(60,1,'biscuit',30),(80,2,'biscuit',30);
Query OK, 5 rows affected (0.04 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select *from bill;
+-----+-----+-----+-----+
| oid | cusid | prod      | price |
+-----+-----+-----+-----+
| 50  | 1     | game      | 50     |
| 60  | 1     | biscuit    | 30     |
| 76  | 3     | shirt     | 100    |
| 80  | 2     | biscuit    | 30     |
| 134 | 4     | Sanitizer  | 80     |
+-----+-----+-----+-----+
5 rows in set (0.01 sec)

mysql> alter table customer add column phnum int;
Query OK, 0 rows affected (0.38 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> update customer set phnum=9409342680 where cid=1;
ERROR 1264 (22003): Out of range value for column 'phnum' at row 1
mysql> alter table customer modify column phnum bigint;
Query OK, 4 rows affected (0.56 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> update customer set phnum=9409342680 where cid=1;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> update customer set phnum=9981070263 where cid=2;
Query OK, 1 row affected (0.03 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> update customer set phnum=9876543210 where cid=3;
Query OK, 1 row affected (0.03 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> update customer set phnum=9447811203 where cid=4;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select *from customer;
```

MySQL 8.0 Command Line Client

```
mysql> select *from customer;
```

cid	cname	phnum
1	Rashmi	9409342680
2	Tanvi	9981070263
3	Nandana	9876543210
4	Sam	9447811203

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

```
mysql> create table company(sid int primary key,sname varchar(20),psname varchar(20),constraint fk_com foreign key(psname) references product(pname) on delete no action on update no action);
Query OK, 0 rows affected (0.25 sec)
```

```
mysql> insert into company values(34,'himalayas','Sanitizer'),(54,'nike','shirt'),(70,'unibic','biscuit');
```

```
Query OK, 3 rows affected (0.04 sec)
```

```
Records: 3 Duplicates: 0 Warnings: 0
```

```
mysql> select *from company;
```

sid	sname	psname
34	himalayas	Sanitizer
54	nike	shirt
70	unibic	biscuit

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

```
mysql> delete from product where pid=8;
```

```
mysql> select *from bill;
```

oid	cusid	prod	price
50	1	game	50
60	1	biscuit	30
76	3	shirt	100
80	2	biscuit	30
134	4	Sanitizer	80

```
5 rows in set (0.01 sec)
```

```
mysql> select *from prodcut;
```

```
ERROR 1146 (42S02): Table 'shop.prodcut' doesn't exist
```

```
mysql> select *from product;
```

pid	pname	count
10	biscuit	50
11	game	20
15	Sanitizer	80
8	shirt	30

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

```
mysql> desc bill;
```

Field	Type	Null	Key	Default	Extra
oid	int	NO	PRI	NULL	
cusid	int	YES	MUL	NULL	
prod	varchar(20)	YES	MUL	NULL	
price	int	YES		NULL	

```
4 rows in set (0.02 sec)
```

```
mysql> alter table company drop constraint fk_com;
```

```
Query OK, 0 rows affected (0.09 sec)
```

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

```
mysql> delete from product where pid=8;
```

```
Query OK, 1 row affected (0.05 sec)
```

```
mysql> select *from bill;
```

oid	cusid	prod	price
50	1	game	50
60	1	biscuit	30
76	3	NULL	100
80	2	biscuit	30
134	4	Sanitizer	80

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

# MySQL 8.0 Command Line Client

```
mysql> create table delivery(dnum int,dname varchar(20),perid int);
Query OK, 0 rows affected (0.23 sec)
```

```
mysql> alter table delivery add primary key(dnum);
Query OK, 0 rows affected (0.33 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table delivery alter perid set default 0;
Query OK, 0 rows affected (0.03 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> alter table delivery add constraint fk_del foreign key(perid) references customer(cid) on delete set default on update set default;
Query OK, 0 rows affected (0.81 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

```
mysql> delete from customer where cid=1;
Query OK, 1 row affected (0.03 sec)
```

```
mysql> select *from customer;
```

cid	cname	phnum
2	Tanvi	9981070263
3	Nandana	9876543210
4	Sam	9447811203

3 rows in set (0.00 sec)

```
mysql> select *from bill;
```

oid	cusid	prod	price
76	3	NULL	100
80	2	biscuit	30
134	4	Sanitizer	80

3 rows in set (0.00 sec)



# MySQL 8.0 Command Line Client

```
mysql> select *from bill;
```

oid	cusid	prod	price
76	3	NULL	100
80	2	biscuit	30
134	4	Sanitizer	80

```
3 rows in set (0.01 sec)
```

```
mysql> alter table delivery drop foreign key fk_del;
```

```
Query OK, 0 rows affected (0.11 sec)
```

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

```
mysql> desc delivery;
```

Field	Type	Null	Key	Default	Extra
dnum	int	NO	PRI	NULL	
dname	varchar(20)	YES		NULL	
perid	int	YES	MUL	0	

```
3 rows in set (0.01 sec)
```

```
mysql> alter table delivery add constraint fk_del foreign key(perid) references customer(cid) on delete cascade on update cascade;
```

```
Query OK, 3 rows affected (0.41 sec)
```

```
Records: 3 Duplicates: 0 Warnings: 0
```

```
mysql> select *from customer;
```

cid	cname	phnum
2	Tanvi	9981070263
3	Nandana	9876543210
4	Sam	9447811203

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

```
mysql> select *from delivery;
```

dnum	dname	perid
20	ram	2
80	karpaga	3
90	shreya	4

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

```
mysql> delete from customer where cid=4;
```

```
Query OK, 1 row affected (0.03 sec)
```

```
mysql> select *from delivery;
```

## MySQL 8.0 Command Line Client

3 rows in set (0.00 sec)

```
mysql> delete from customer where cid=4;
```

Query OK, 1 row affected (0.03 sec)

```
mysql> select *from delivery;
```

dnum	dname	perid
20	ram	2
80	karpaga	3

2 rows in set (0.01 sec)

```
mysql> select *from customer;
```

cid	cname	phnum
2	Tanvi	9981070263
3	Nandana	9876543210

2 rows in set (0.01 sec)

# MySQL 8.0 Command Line Client

```
mysql> select *from bill;
```

```
+-----+-----+-----+-----+
| oid | cusid | prod  | price |
+-----+-----+-----+
| 76  | 3     | NULL  | 100   |
| 80  | 2     | biscuit | 30    |
+-----+-----+-----+
2 rows in set (0.02 sec)
```

```
mysql> alter table bill drop foreign key fk_order;
```

```
Query OK, 0 rows affected (0.18 sec)
```

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

```
mysql> alter table bill add constraint fk_order foreign key(cusid) references customer(cid) on delete cascade on update cascade;
```

```
Query OK, 2 rows affected (0.53 sec)
```

```
Records: 2 Duplicates: 0 Warnings: 0
```

```
mysql> update customer set cid=4 where cid=3;
```

```
Query OK, 1 row affected (0.03 sec)
```

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

```
mysql> select *from customer;
```

```
+-----+-----+-----+
| cid | cname  | phnum  |
+-----+-----+-----+
| 2   | Tanvi  | 9981070263 |
| 4   | Nandana | 9876543210 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> select *from bill;
```

```
+-----+-----+-----+-----+
| oid | cusid | prod  | price |
+-----+-----+-----+-----+
| 76  | 4     | NULL  | 100   |
| 80  | 2     | biscuit | 30    |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> select *from delivery;
```

```
+-----+-----+-----+
| dnum | dname  | perid |
+-----+-----+-----+
| 20   | ram    | 2     |
| 80   | karpaga | 4     |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> create index ind on delivery(dname);
```

```
Query OK, 0 rows affected (0.22 sec)
```

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

```
mysql> show indexes from delivery;
```

Table	Non_unique	Key_name	Seq_in_index	Column_name	Collation	Cardinality	Sub_part	Packed	Null	Index_type	Comment	Index_comment	Visible	Expression
delivery	0	PRIMARY	1	dnum	A	2	NULL	NULL		BTREE			YES	NULL
delivery	1	fk_del	1	perid	A	2	NULL	NULL	YES	BTREE			YES	NULL
delivery	1	ind	1	dname	A	2	NULL	NULL	YES	BTREE			YES	NULL

```
3 rows in set (0.07 sec)
```

```
mysql> alter table delivery drop index ind;
```

```
Query OK, 0 rows affected (0.08 sec)
```

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

```
mysql> show indexes from delivery;
```

Table	Non_unique	Key_name	Seq_in_index	Column_name	Collation	Cardinality	Sub_part	Packed	Null	Index_type	Comment	Index_comment	Visible	Expression
delivery	0	PRIMARY	1	dnum	A	2	NULL	NULL		BTREE			YES	NULL
delivery	1	fk_del	1	perid	A	2	NULL	NULL	YES	BTREE			YES	NULL

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

```
mysql>
```