

Show all Databases

```
>> show databases;
```

Output

```
+-----+
| Database          |
+-----+
| information_schema |
| mysql             |
| performance_schema |
| sys               |
| test              |
+-----+
```

Dropping database testdb;

```
>> drop database testdb;
```

Creating database test;

```
>> create database test;
```

Selecting database test;

```
>> use test;
```

Creating a table in that;

```
>> create table people (
    id INT,
    first_name VARCHAR(50),
    last_name VARCHAR(50),
    email VARCHAR(50),
    gender VARCHAR(50)
);

>> insert into people (id, first_name, last_name, email, gender)
values (1, 'Donni', 'Steinor', 'dsteinor0@mashable.com', 'Female');

>> insert into people (id, first_name, last_name, email, gender)
values (2, 'Aloin', 'Nesbit', 'anesbit1@freewebs.com', 'Male');

>> insert into people (id, first_name, last_name, email, gender)
values (3, 'Marlowe', 'Lowton', 'mlowton2@newsvine.com', 'Male');

>> insert into people (id, first_name, last_name, email, gender)
values (4, 'Grissel', 'Steer', 'gsteer3@marketwatch.com', 'Female');

>> insert into people (id, first_name, last_name, email, gender)
values (5, 'Maurits', 'Gisborne', 'mgisborne4@tamu.edu', 'Male');

>> insert into people (id, first_name, last_name, email, gender)
values (6, 'Lizette', 'Nary', 'lnary5@dagondesign.com', 'Female');

>> insert into people (id, first_name, last_name, email, gender)
values (7, 'Brittni', 'Snartt', 'bsnartt6@domainmarket.com', 'Female');

>> insert into people (id, first_name, last_name, email, gender)
values (8, 'Kaine', 'Swigg', 'kswigg7@state.gov', 'Male');
```

```
>> insert into people (id, first_name, last_name, email, gender)
values (9, 'Rudolfo', 'Leahey', 'rleahey8@myspace.com', 'Male');
```

```
>> insert into people (id, first_name, last_name, email, gender)
values (10, 'Erik', 'Porritt', 'eporritt9@ucsd.edu', 'Male');
```

Creating Index

```
>> create index id_index on people(id);
```

```
>> create unique index fname_index on people(first_name);
```

Dropping Index

```
>> alter table people drop index fname_index;
```

Displaying table peoples;

```
>> select * from people;
```

Output

id	first_name	last_name	email	gender	age
1	Donni	Steinor	dsteinor0@mashable.com	Female	NULL
2	Aloin	Nesbit	anesbit1@freewebs.com	Male	NULL
3	Marlowe	Lowton	mlowton2@newsvine.com	Male	NULL
4	Grissel	Steer	gsteer3@marketwatch.com	Female	NULL
5	Maurits	Gisborne	mgisborne4@tamu.edu	Male	NULL
6	Lizette	Nary	lnary5@dagondesign.com	Female	NULL
7	Brittni	Snartt	bsnartt6@domainmarket.com	Female	NULL
8	Kaine	Swigg	kswigg7@state.gov	Male	NULL
9	Rudolfo	Leahey	rleahey8@myspace.com	Male	NULL
10	Erik	Porritt	eporritt9@ucsd.edu	Male	NULL

Adding a new Column age (int);

```
>> alter table people add age int;
```

Inserting a new value in that column;

```
>> insert into people (id, first_name, last_name, email, gender, age) values (11, 'Jean', 'Porritt', 'jean9@ucsd.edu', 'Male', 33);
```

Displaying the values of newly inserted value

```
>> select * from people where age = 33;
```

Output

id	first_name	last_name	email	gender	age
11	Jean	Porritt	jean9@ucsd.edu	Male	33

Removing the age column from the table people;

```
>>> alter table people drop column age;
```

Displaying peoples table after removal of columns;

```
>> select * from people limit 5;
```

Output

id	first_name	last_name	email	gender
1	Donni	Steinor	dsteinor0@mashable.com	Female
2	Aloin	Nesbit	anesbit1@freewebs.com	Male
3	Marlowe	Lowton	mlowton2@newsvine.com	Male
4	Grissel	Steer	gsteer3@marketwatch.com	Female
5	Maurits	Gisborne	mgisborne4@tamu.edu	Male

Altering data-types of columns;

```
>> alter table people add column DOB date;
```

```
>> alter table people modify column DOB year;
```

Creating a View for males & Displaying output;

```
>> create view Boys as select first_name, last_name from people where gender = "Male";
```

```
>> select * from Boys;
```

Output:

first_name	last_name
Aloin	Nesbit
Marlowe	Lowton
Maurits	Gisborne
Kaine	Swigg
Rudolfo	Leahey
Erik	Porritt
Jean	Porritt

Dropping a view

```
>> drop view Boys;
```

Renaming a table;

```
>> rename table Student to test1;
```

Truncate the table;

```
>>truncate table test1;
```

Dropping a table;

```
>> drop table test1;
```

Adding a auto_increment field in schema;

```
>> alter table people modify id int not null auto_increment primary key;
```

Changing the intital value to 100

```
>> alter table people AUTO_INCREMENT=100;
```

Deleting a record from people table;

```
>> delete from people where first_name = "Egor";
```

Inserting in to the people table;

```
>> insert into people (first_name, last_name, email, gender) values ('Egor', 'Kreed', 'egor33@ucsd.edu', 'Male');
```

Update a record

```
>> update people set dob = 2003 where id = 2;
```

Output:

id	first_name	last_name	email	gender	DOB
2	Aloin	Nesbit	anesbit1@freewebs.com	Male	2003

Performing some SQL functions

```
>> select max(id), min(id), count(gender), avg(id), sum(id) from people where gender = "Female";
```

Output

max(id)	min(id)	count(gender)	avg(id)	sum(id)
7	1	4	4.5000	18

Order By in SQL

```
>> select first_name from people order by first_name desc limit 5;
```

Output:

first_name
Rudolfo
Maurits
Marlowe
Lizette
Kaine

Using And operator with greater than condition

```
>> select * from people where id = 3 and (33 > 3);
```

Output:

id	first_name	last_name	email	gender	DOB
3	Marlowe	Lowton	mlowton2@newsvine.com	Male	NULL

Using Or operator with less than condition

```
>> select * from people where id = 3 or (7 < 3);
```

Output

id	first_name	last_name	email	gender	DOB
3	Marlowe	Lowton	mlowton2@newsvine.com	Male	NULL

Using Not operator

```
>> select * from people where not id = 3 limit 3;
```

Output:

id	first_name	last_name	email	gender	DOB
1	Donni	Steinor	dsteinor0@mashable.com	Female	NULL
2	Aloin	Nesbit	anesbit1@freewebs.com	Male	2003
4	Grissel	Steer	gsteer3@marketwatch.com	Female	NULL

Using Between

```
>> select * from people where id between 1 and 3;
```

Output:

id	first_name	last_name	email	gender	DOB
1	Donni	Steinor	dsteinor0@mashable.com	Female	NULL
2	Aloin	Nesbit	anesbit1@freewebs.com	Male	2003
3	Marlowe	Lowton	mlowton2@newsvine.com	Male	NULL