```
/opt/lampp/bin/mysql -u root -p
show databases;
+----+
| Database |
+----+
admin_panel
ecommerce
information schema |
kajal
kajai_test |
       performance_schema |
phpmyadmin |
queries
test
use terminal_query;
      Database changed
show tables:
create database terminal_query;
use terminal_query;
show tables;
create table student(s_id int not null auto_increment,s_name varchar(100) not null, s_email
varchar(100) not null,s_pwd varchar(100) not null, primary key(s_id));
MariaDB [terminal_query]> insert into student(s_name,s_email,s_pwd)
values("kajal","kajal@gmail.com","123");
Query OK, 1 row affected (0.047 sec)
MariaDB [terminal_query]> show tables;
+----+
| Tables_in_terminal_query |
+----+
student |
+----+
1 row in set (0.001 sec)
```

MariaDB [terminal_query]> select * from student;

sudo /opt/lampp/lampp start

```
+----+
| s_id | s_name | s_email | s_pwd |
+----+
| 1 | kajal | kajal@gmail.com | 123 |
+----+
1 row in set (0.001 sec)
MariaDB [terminal query]> insert into student(s name,s email,s pwd)
values("jalpa","jalpa@gmail.com","123");
Query OK, 1 row affected (0.068 sec)
MariaDB [terminal query]> select * from student;
+----+
| s_id | s_name | s_email | s_pwd | +----+
 1 | kajal | kajal@gmail.com | 123 |
  2 | jalpa | jalpa@gmail.com | 123 |
+----+----
2 rows in set (0.002 sec)
MariaDB [terminal_query]> select * from student where s_id ="2";
+----+
| s_id | s_name | s_email
+----+
| 2 | jalpa | jalpa@gmail.com | 123 |
+----+
1 row in set (0.001 sec)
MariaDB [terminal_query]> select s_name from student;
+----+
s_name
+----+
| kajal |
| jalpa |
+----+
2 rows in set (0.000 sec)
```

MariaDB [terminal_query]> create table customer (cust_id int not null auto_increment,cust_name varchar(100) not null,cust_contact int(100) not null,cust_add varchar(100) not null, cust_city varchar(100) not null, cust_pincode int(100) not null, cust_country varchar(100) not null,primary key(cust_id));

Query OK, 0 rows affected (0.391 sec)

Customer

```
ariaDB [terminal query]> insert into customer (cust name,
cust contact, cust add, cust city, cust pincode, cust country) values ("kajal", "908976646", "34th
AvSuite 3B", "ahmedabad", "747372", "india");
Query OK, 1 row affected (0.094 sec)
ffected (0.094 sec)
MariaDB [terminal_query]> insert into customer (cust_name,
cust_contact,cust_add,cust_city,cust_pincode,cust_country) values("jal","908978846","39 AvSuite
3B","jaipur","747372","india");
Query OK, 1 row affected (0.087 sec)
MariaDB [terminal_query]> insert into customer (cust_name,
cust contact, cust add, cust city, cust pincode, cust country) values ("Riva", "98978846", "AvSuite
3B","mexico","747372","America");
Query OK, 1 row affected (0.066 sec)
MariaDB [terminal_query]> insert into customer (cust_name,
cust_contact,cust_add,cust_city,cust_pincode,cust_country) values("anjani","98008846","AvSuite
3B", "abcd", "747372", "africa");
Query OK, 1 row affected (0.060 sec)
MariaDB [terminal query] > insert into customer (cust name,
cust contact, cust add, cust city, cust pincode, cust country) values ("avni", "98978846", "AvSuite
3B", "mexico", "747372", "india");
Query OK, 1 row affected (0.068 sec)
MariaDB [terminal_query]> select * from customer;
+-----+
1 | kajal | 908976646 | 34th AvSuite 3B | ahmedabad | 747372 | india
    2 | jal | 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
    3 | Riya | 98978846 | AvSuite 3B | mexico | 747372 | America
   4 | anjani | 98008846 | AvSuite 3B | abcd |
                                                  747372 | africa
    5 | avni | 98978846 | AvSuite 3B | mexico | 747372 | india
5 rows in set (0.001 \text{ sec})
MariaDB [terminal_query] > select cust_name,cust_city from customer;
+----+
| cust_name | cust_city |
+----+
| kajal | ahmedabad |
l ial
      | jaipur |
Riya
      mexico
| anjani | abcd |
```

```
avni | mexico |
+----+
5 rows in set (0.001 sec)
MariaDB [terminal query] > select DISTINCT cust country from customer;
+----+
cust_country
+----+
| india |
| America |
| africa |
+----+
3 \text{ rows in set } (0.001 \text{ sec})
MariaDB [terminal_query]> select * from customer where cust_country="india" and
cust city="jaipur";
+-----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country |
+-----+
  2 | jal | 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
+-----+
1 row in set (0.001 sec)
MariaDB [terminal_query]> select * from customer where cust_country="india" or
cust city="jaipur";
+-----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country |
+-----+
  1 | kajal | 908976646 | 34th AvSuite 3B | ahmedabad |
                                        747372 | india
  2 | jal | 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
  5 | avni | 98978846 | AvSuite 3B | mexico | 747372 | india
MariaDB [terminal_query]> select * from customer where not cust_country="india";
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country |
+----+
           98978846 | AvSuite 3B | mexico | 747372 | America
  4 | anjani | 98008846 | AvSuite 3B | abcd | 747372 | africa
2 rows in set (0.001 sec)
```

```
MariaDB [terminal query]> select * from customer ORDER BY cust city:
+-----+
+-----+
   4 | anjani | 98008846 | AvSuite 3B | abcd | 747372 | africa
   1 | kajal | 908976646 | 34th AvSuite 3B | ahmedabad | 747372 | india
   2 | jal | 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
   3 | Riya | 98978846 | AvSuite 3B | mexico | 747372 | America |
   5 | avni | 98978846 | AvSuite 3B | mexico |
                                       747372 | india
MariaDB [terminal query] > select * from customer ORDER BY cust city DESC;
98978846 | AvSuite 3B | mexico |
   3 | Riya
                                       747372 | America
         | 98978846 | AvSuite 3B | mexico | 747372 | india
| 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
   5 | avni
   2 | ial
   1 | kajal | 908976646 | 34th AvSuite 3B | ahmedabad | 747372 | india
   4 | anjani | 98008846 | AvSuite 3B | abcd | 747372 | africa |
+-----+
5 rows in set (0.001 \text{ sec})
MariaDB [terminal query]> select * from customer ORDER BY cust city,cust country;
+-----+
4 | anjani | 98008846 | AvSuite 3B | abcd | 747372 | africa
   1 | kajal | 908976646 | 34th AvSuite 3B | ahmedabad | 747372 | india
   2 | jal | 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
   3 | Riya | 98978846 | AvSuite 3B | mexico | 747372 | America
   5 | avni | 98978846 | AvSuite 3B | mexico | 747372 | india
5 rows in set (0.001 \text{ sec})
MariaDB [terminal_query]> update customer set cust_contact="9000000" city="baroda" where
cust name="anjani";
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to
your MariaDB server version for the right syntax to use near 'city="baroda" where
cust_name="anjani" at line 1
MariaDB [terminal_query]> update customer SET cust_city="baroda" where cust_name=
 -> "anjani";
Query OK, 1 row affected (0.072 sec)
Rows matched: 1 Changed: 1 Warnings: 0
```

```
Query OK, 1 row affected (0.089 sec)
Rows matched: 1 Changed: 1 Warnings: 0
MariaDB [terminal_query]> select * from customer;
+-----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country |
+-----+
   1 | kajal | 908976646 | 34th AvSuite 3B | ahmedabad |
                                           747372 | india
   2 | jal | 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
   3 | Riya | 98978846 | AvSuite 3B | mexico | 0 | America
   4 | anjani | 98008846 | AvSuite 3B | baroda | 747372 | africa |
   5 | avni | 98978846 | AvSuite 3B | mexico | 747372 | india
+-----+
5 rows in set (0.001 sec)
MariaDB [terminal_query]> delete from customer where cust_id="1";
Query OK, 1 row affected (0.059 sec)
MariaDB [terminal query]> select * from customer;
+-----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country |
+-----+
   2 | jal | 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
   3 | Riya | 98978846 | AvSuite 3B | mexico | 0 | America | 4 | anjani | 98008846 | AvSuite 3B | baroda | 747372 | africa |
   5 | avni | 98978846 | AvSuite 3B | mexico | 747372 | india
MariaDB [terminal query]> select * from customer limit 2;
+-----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country |
+-----+
   2 | jal | 908978846 | 39 AvSuite 3B | jaipur |
                                       747372 | india
   3 | Riya | 98978846 | AvSuite 3B | mexico | 0 | America |
+-----+
2 rows in set (0.001 sec)
MariaDB [terminal_query]> alter table customer add salary bigint(40) not null after cust_country;
Query OK, 0 rows affected (0.221 sec)
Records: 0 Duplicates: 0 Warnings: 0
MariaDB [terminal_query]> select * from customer;
+-----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country | salary |
2 | jal | 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
                                                      0 |
   3 | Riya | 98978846 | AvSuite 3B | mexico | 0 | America | 0 |
   4 | anjani | 98008846 | AvSuite 3B | baroda | 747372 | africa |
                                                       0 |
   5 | avni | 98978846 | AvSuite 3B | mexico | 747372 | india |
                                                       0 |
```

MariaDB [terminal query]> update customer SET cust pincode="000" where cust name= "riya";

```
4 rows in set (0.001 sec)
MariaDB [terminal query] > update customer set salary="30000" where cust id=2;
Query OK, 1 row affected (0.066 sec)
Rows matched: 1 Changed: 1 Warnings: 0
MariaDB [terminal query]> select * from customer;
+-----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country | salary |
+----+
          | 908978846 | 39 AvSuite 3B | jaipur |
                                           747372 | india
                                                        | 30000 |
   2 | ial
              98978846 | AvSuite 3B | mexico |
   3 | Riva
                                              0 | America
                                                            0 |
                                           747372 | africa
   4 | anjani |
              98008846 | AvSuite 3B | baroda |
                                                            0 |
             98978846 | AvSuite 3B | mexico
                                           747372 | india
   5 | avni
                                                            0 |
MariaDB [terminal query] > update customer set salary="2000" where cust id=1;
Query OK, 0 rows affected (0.001 sec)
Rows matched: 0 Changed: 0 Warnings: 0
MariaDB [terminal query] > update customer set salary="20000" where cust id=3;
Query OK, 1 row affected (0.067 sec)
Rows matched: 1 Changed: 1 Warnings: 0
MariaDB [terminal query]> update customer set salary="25000" where cust id=4;
Query OK, 1 row affected (0.070 sec)
Rows matched: 1 Changed: 1 Warnings: 0
MariaDB [terminal query]> select * from customer;
+-----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country | salary |
+----+
          | 908978846 | 39 AvSuite 3B | jaipur |
                                          747372 | india
                                                        | 30000 |
   3 | Riya | 98978846 | AvSuite 3B | mexico |
                                         0 | America
                                                        | 20000 |
   4 | anjani |
              98008846 | AvSuite 3B | baroda |
                                           747372 | africa
                                                         | 25000 |
   5 | avni |
             98978846 | AvSuite 3B | mexico |
                                           747372 | india
                                                            0 |
4 rows in set (0.001 sec)
MariaDB [terminal query]> update customer set salary="25000" where cust id=5;
Query OK, 1 row affected (0.065 sec)
Rows matched: 1 Changed: 1 Warnings: 0
MariaDB [terminal query]> select * from customer;
+----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country | salary |
```

```
| 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
                                                               | 20000 |
   3 | Riya | 98978846 | AvSuite 3B | mexico | 0 | America
                                                               | 25000 |
   4 | anjani |
               98008846 | AvSuite 3B | baroda | 747372 | africa
           | 98978846 | AvSuite 3B | mexico | 747372 | india
   5 | avni
                                                                | 25000 |
4 rows in set (0.001 sec)
MariaDB [terminal_query]> select MIN(salary) as customer from customer;
+----+
| customer |
+----+
 20000 |
+----+
1 row in set (0.001 sec)
MariaDB [terminal_query]> select MAX(salary) as customer from customer;
+----+
customer
+----+
 30000 |
+----+
1 row in set (0.001 sec)
MariaDB [terminal_query] > select COUNT(salary) as customer from customer;
+----+
customer
+----+
    4 |
+----+
1 row in set (0.001 sec)
MariaDB [terminal_query]> select SUM(salary) as customer from customer;
+----+
customer
+----+
| 100000|
+----+
1 row in set (0.001 sec)
MariaDB [terminal_query]> select cust_name from customer where cust_name LIKE 'j%';
+----+
| cust_name |
+----+
| jal |
+----+
```

| 30000 |

```
+----+
cust_name
+----+
| Riya |
+----+
1 row in set (0.001 sec)
MariaDB [terminal query] > select cust name from customer where cust name LIKE 'a %';
+----+
cust_name
+----+
| anjani |
avni |
+----+
2 rows in set (0.001 sec)
MariaDB [terminal query]> select cust name from customer where cust name LIKE 'a%k';
Empty set (0.001 \text{ sec})
MariaDB [terminal query] > select * from customer where cust country LIKE 'a r%';
+-----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country | salary |
98008846 | AvSuite 3B | baroda |
   4 | anjani |
                                            747372 | africa
                                                           25000 l
MariaDB [terminal query] > select cust city from customer where cust country IN (india, africa);
ERROR 1054 (42S22): Unknown column 'india' in 'where clause'
MariaDB [terminal_query] > select cust_city from customer where cust_country IN ('india', 'africa');
+----+
| cust city |
+----+
| jaipur |
| baroda |
mexico
3 \text{ rows in set } (0.001 \text{ sec})
MariaDB [terminal_query]> select * from customer;
+-----+
| cust_id | cust_name | cust_contact | cust_add | cust_city | cust_pincode | cust_country | salary |
+-----+
   2 | jal | 908978846 | 39 AvSuite 3B | jaipur | 747372 | india
                                                           | 30000 |
```

MariaDB [terminal_query]> select cust_name from customer where cust_name LIKE '%a';

A rows in set (0.001 sec)	3 Riya 98978846 AvSuite 3B mexico 0 America 20000 4 anjani 98008846 AvSuite 3B baroda 747372 africa 25000 5 avni 98978846 AvSuite 3B mexico 747372 india 25000 +
('india', 'africa'); ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds by your MariaDB server version for the right syntax to use near 'NOTIN ('india', 'africa')' at line 1 MariaDB [terminal_query]> select cust_city from customer where cust_country NOT IN ('india', 'africa'); ++ cust_city ++ mexico ++ cust_id cust_name cust_contact cust_add cust_city cust_pincode cust_country salary ++ 2 jal 908978846 39 AvSuite 3B mexico 0 America 20000 4 anjani 98098846 AvSuite 3B mexico 747372 india 25000 5 avni 98978846 39 AvSuite 3B mexico 747372 india 25000 4 row in set (0.001 sec) MariaDB [terminal_query]> select * from customer where salary BETWEEN 20000 AND 30000; +	
+++++++	ndia', 'africa'); RROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to our MariaDB server version for the right syntax to use near 'NOTIN ('india', 'africa')' at line 1 [ariaDB [terminal_query]> select cust_city from customer where cust_country NOT IN ndia', 'africa');
cust_id cust_name cust_contact cust_add cust_city cust_pincode cust_country salary ++++++	
2 jal 908978846 39 AvSuite 3B jaipur 747372 india 30000 3 Riya 98978846 AvSuite 3B mexico 0 America 20000 4 anjani 98008846 AvSuite 3B baroda 747372 africa 25000 5 avni 98978846 AvSuite 3B mexico 747372 india 25000 +++++	cust_id cust_name cust_contact cust_add
4 rows in set (0.001 sec) MariaDB [terminal_query]> select * from customer where salary BETWEEN 20000 AND 30000; ++++++	2 jal 908978846 39 AvSuite 3B jaipur 747372 india 30000 3 Riya 98978846 AvSuite 3B mexico 0 America 20000 4 anjani 98008846 AvSuite 3B baroda 747372 africa 25000 5 avni 98978846 AvSuite 3B mexico 747372 india 25000
++++++	
cust_id cust_name cust_contact cust_add cust_city cust_pincode cust_country salary ++++++	
2 jal 908978846 39 AvSuite 3B jaipur 747372 india 30000 3 Riya 98978846 AvSuite 3B mexico 0 America 20000 4 anjani 98008846 AvSuite 3B baroda 747372 africa 25000 5 avni 98978846 AvSuite 3B mexico 747372 india 25000 ++	cust_id cust_name cust_contact cust_add cust_city cust_pincode cust_country salary
	2 jal 908978846 39 AvSuite 3B jaipur 747372 india 30000 3 Riya 98978846 AvSuite 3B mexico 0 America 20000 4 anjani 98008846 AvSuite 3B baroda 747372 africa 25000
MariaDB [terminal_query]> select * from customer where salary NOT BETWEEN 20000 AND 30000; Empty set (0.001 sec) MariaDB [terminal_query]> select * from customer where salary BETWEEN 20000 AND 30000 AND cust_id NOT IN(1,2);	0000; mpty set (0.001 sec) [ariaDB [terminal_query]> select * from customer where salary BETWEEN 20000 AND 30000

```
3 | Riya | 98978846 | AvSuite 3B | mexico |
                                                    0 | America
                                                               | 20000 |
    4 | anjani | 98008846 | AvSuite 3B | baroda | 747372 | africa
                                                               | 25000 |
                98978846 | AvSuite 3B | mexico | 747372 | india
                                                               | 25000 |
    5 | avni |
3 \text{ rows in set } (0.001 \text{ sec})
MariaDB [terminal_query]> create table orders( orderId int NOT NULL AUTO_INCREMENT
PRIMARY KEY, cust id int NOT NULL, order date date NOT NULL);
Query OK, 0 rows affected (0.464 sec)
MariaDB [terminal_query]> insert into orders("1","2021-05-12");
ERROR 1064 (42000): You have an error in your SOL syntax; check the manual that corresponds to
your MariaDB server version for the right syntax to use near "1","2021-05-12")' at line 1
MariaDB [terminal query] > insert into orders (cust id, order date) values ("1", "2021-05-12");
Query OK, 1 row affected (0.064 sec)
MariaDB [terminal query]> select * from orders;
+----+
orderId | cust id | order date |
+----+
    1 | 1 | 2021-05-12 |
+----+
1 row in set (0.001 sec)
MariaDB [terminal query]> insert into orders (cust id, order date) values ("2", "2021-07-15");
Query OK, 1 row affected (0.057 sec)
MariaDB [terminal_query] > insert into orders (cust_id,order_date) values ("2","2021-08-1");
Query OK, 1 row affected (0.070 sec)
MariaDB [terminal_query]> insert into orders (cust_id,order_date) values ("2","2020-7-07");
Query OK, 1 row affected (0.062 sec)
MariaDB [terminal query]> select * from orders;
+----+
orderId | cust id | order date |
+----+
         1 | 2021-05-12 |
    1 |
    2 |
         2 | 2021-07-15 |
    3 |
         2 | 2021-08-01 |
   4 | 2 | 2020-07-07 |
+----+
4 rows in set (0.001 \text{ sec})
MariaDB [terminal_query]> select orders.orderId, customer.cust_name from orders INNER JOIN
customer ON orders.cust id=customer.cust id;
+----+
| orderId | cust name |
+----+
```

2 | jal |

3 jal	
4 jal	

MariaDB [terminal_query]> select customer.cust_name from customer LEFT JOIN orders ON customer.cust_id=orders.cust_id ORDER BY customer.cust_name;

```
+-----+
| cust_name |
+-----+
| anjani |
| avni |
| jal |
| jal |
| jal |
| Riya |
+------+
```

6 rows in set (0.001 sec)

MariaDB [terminal_query]> select orders.orderId, customer.cust_name from orders RIGHT JOIN customer ON orders.cust_id=customer.cust_id order BY orders.orderId;

```
+-----+
| orderId | cust_name |
+-----+
| NULL | Riya |
| NULL | avni |
| NULL | anjani |
| 2 | jal |
| 3 | jal |
| 4 | jal |
+------+
```

6 rows in set (0.001 sec)

MariaDB [terminal_query]> select customer.cust_name,orders.orderId from customer cross join orders;

```
+----+
| cust_name | orderId |
+----+
           1 |
| jal
Riya
            1 |
anjani |
             1 |
avni
            1 |
| jal
           2 |
Riya
            2 |
anjani |
             2 |
avni
            2 |
| jal
           3 |
Riya
             3 |
anjani |
             3 |
avni
            3 |
| jal
           4 |
Riya
            4
```

```
4 |
| anjani |
avni |
           4 |
+----+
16 rows in set (0.001 sec)
MariaDB [terminal_query]> select a.cust_name AS cust_name1, b.cust_name AS suct_name2,
a.cust_city from customer a, customer b where a.cust_id <> b.cust_id AND a.cust_city=b.cust_city
ORDER BY a.cust city;
+----+
| cust_name1 | suct_name2 | cust_city |
+----+
| Riva | avni | mexico |
avni
       Riya
             | mexico |
+----+
2 rows in set (0.001 sec)
MariaDB [terminal_query]> select cust_name from customer UNION select cust_id from orders;
+----+
cust_name
+----+
| jal
| Riya
anjani |
avni
| 1
| 2
6 \text{ rows in set } (0.001 \text{ sec})
MariaDB [terminal_query] > select COUNT(cust_id),cust_city from customer GROUP BY
cust_city;
+----+
| COUNT(cust_id) | cust_city |
+----+
       1 | baroda |
       1 | jaipur |
       2 | mexico |
+----+
3 \text{ rows in set } (0.001 \text{ sec})
MariaDB [terminal_query]> select customer.cust_name, COUNT(orders.orderId) AS
numberoforders from orders LEFT JOIN customer ON orders.cust_id=customer.cust_id GROUP
BY cust_name;
+----+
| cust_name | numberoforders |
+----+
             1 |
| NULL |
|jal |
             3 |
2 rows in set (0.017 sec)
```

MariaDB [terminal_query]> select COUNT(cust_id),cust_country from customer GROUP BY cust_country HAVING COUNT(cust_id)>1;
++ COUNT(cust_id) cust_country
++ 2 india ++
1 row in set (0.001 sec)
MariaDB [terminal_query]> select cust_name from customer where EXISTS (select order_date from orders where orders.cust_id=orders.orderId AND salary >20000); ++ cust_name ++
jal
3 rows in set (0.001 sec)
MariaDB [terminal_query]> select cust_name from customer where cust_id = ANY (select orderId from orders); ++
cust_name
++ jal
5 10W5 III Set (0.017 Sec)
MariaDB [terminal_query]> select cust_name from customer where cust_id=ALL (select cust_id FROM orders); Empty set (0.001 sec)
MariaDB [terminal_query]> select cust_name from customer where cust_id=ALL (select cust_id FROM orders where orderId=2);
++ cust_name
++ jal