CUSTOMER TABLE

1.

2.


```
MySQL 8.0 Command Line Client                                                                                          –  □  ×
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 '(varchar(25)),last_name (varchar(25)),age int,country(va
rchar(20)))' at line 1
mysql>  create table customer(customer_id int,first_name varchar(25),last_name varchar(25),age int,country varchar(20));
Query OK, 0 rows affected (0.49 sec)

mysql> insert into customer values(1,'john','doe',31,'USA'),(2,'robert','luna',22,'USA'),(3,'david','robinson',22,'UK'),(4,'john','reinhardt',25,'UK'),(5,'betty','doe',28,'UAE');
Query OK, 5 rows affected (0.11 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from table
    -> select * from table customer;
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 'table
select * from table customer' at line 1
mysql> select * from customer;
+-------------+------------+-----------+------+---------+
| customer_id | first_name | last_name | age  | country |
+-------------+------------+-----------+------+---------+
|           1 | john       | doe       |   31 | USA     |
|           2 | robert     | luna      |   22 | USA     |
|           3 | david      | robinson  |   22 | UK      |
|           4 | john       | reinhardt |   25 | UK      |
|           5 | betty      | doe       |   28 | UAE     |
+-------------+------------+-----------+------+---------+
5 rows in set (0.00 sec)

mysql>  select * from customer order by first_name;
+-------------+------------+-----------+------+---------+
| customer_id | first_name | last_name | age  | country |
+-------------+------------+-----------+------+---------+
|           5 | betty      | doe       |   28 | UAE     |
|           3 | david      | robinson  |   22 | UK      |
|           1 | john       | doe       |   31 | USA     |
|           4 | john       | reinhardt |   25 | UK      |
|           2 | robert     | luna      |   22 | USA     |
+-------------+------------+-----------+------+---------+
5 rows in set (0.03 sec)

mysql> select * from customer order by age ASC;
+-------------+------------+-----------+------+---------+
| customer_id | first_name | last_name | age  | country |
+-------------+------------+-----------+------+---------+
|           2 | robert     | luna      |   22 | USA     |
|           3 | david      | robinson  |   22 | UK      |
|           4 | john       | reinhardt |   25 | UK      |
|           5 | betty      | doe       |   28 | UAE     |
|           1 | john       | doe       |   31 | USA     |
+-------------+------------+-----------+------+---------+
5 rows in set (0.00 sec)

mysql>
```

3.


```
MySQL 8.0 Command Line Client                                                                                          –  □  ×
select * from table customer' at line 1
mysql> select * from customer;
+-------------+------------+-----------+------+---------+
| customer_id | first_name | last_name | age  | country |
+-------------+------------+-----------+------+---------+
|           1 | john       | doe       |   31 | USA     |
|           2 | robert     | luna      |   22 | USA     |
|           3 | david      | robinson  |   22 | UK      |
|           4 | john       | reinhardt |   25 | UK      |
|           5 | betty      | doe       |   28 | UAE     |
+-------------+------------+-----------+------+---------+
5 rows in set (0.00 sec)

mysql>  select * from customer order by first_name;
+-------------+------------+-----------+------+---------+
| customer_id | first_name | last_name | age  | country |
+-------------+------------+-----------+------+---------+
|           5 | betty      | doe       |   28 | UAE     |
|           3 | david      | robinson  |   22 | UK      |
|           1 | john       | doe       |   31 | USA     |
|           4 | john       | reinhardt |   25 | UK      |
|           2 | robert     | luna      |   22 | USA     |
+-------------+------------+-----------+------+---------+
5 rows in set (0.03 sec)

mysql> select * from customer order by age ASC;
+-------------+------------+-----------+------+---------+
| customer_id | first_name | last_name | age  | country |
+-------------+------------+-----------+------+---------+
|           2 | robert     | luna      |   22 | USA     |
|           3 | david      | robinson  |   22 | UK      |
|           4 | john       | reinhardt |   25 | UK      |
|           5 | betty      | doe       |   28 | UAE     |
|           1 | john       | doe       |   31 | USA     |
+-------------+------------+-----------+------+---------+
5 rows in set (0.00 sec)

mysql> select * from customer order by age DESC;
+-------------+------------+-----------+------+---------+
| customer_id | first_name | last_name | age  | country |
+-------------+------------+-----------+------+---------+
|           1 | john       | doe       |   31 | USA     |
|           5 | betty      | doe       |   28 | UAE     |
|           4 | john       | reinhardt |   25 | UK      |
|           2 | robert     | luna      |   22 | USA     |
|           3 | david      | robinson  |   22 | UK      |
+-------------+------------+-----------+------+---------+
5 rows in set (0.00 sec)

mysql>
```

4.


```
mysql> select * from customer order by first_name;
+-------------+------------+-----------+-----+---------+
| customer_id | first_name | last_name | age | country |
+-------------+------------+-----------+-----+---------+
|           5 | betty      | doe       |  28 | UAE     |
|           3 | david      | robinson  |  22 | UK      |
|           1 | john       | doe       |  31 | USA     |
|           4 | john       | reinhardt |  25 | UK      |
|           2 | robert     | luna      |  22 | USA     |
+-------------+------------+-----------+-----+---------+
5 rows in set (0.03 sec)

mysql> select * from customer order by age ASC;
+-------------+------------+-----------+-----+---------+
| customer_id | first_name | last_name | age | country |
+-------------+------------+-----------+-----+---------+
|           2 | robert     | luna      |  22 | USA     |
|           3 | david      | robinson  |  22 | UK      |
|           4 | john       | reinhardt |  25 | UK      |
|           5 | betty      | doe       |  28 | UAE     |
|           1 | john       | doe       |  31 | USA     |
+-------------+------------+-----------+-----+---------+
5 rows in set (0.00 sec)

mysql> select * from customer order by age DESC;
+-------------+------------+-----------+-----+---------+
| customer_id | first_name | last_name | age | country |
+-------------+------------+-----------+-----+---------+
|           1 | john       | doe       |  31 | USA     |
|           5 | betty      | doe       |  28 | UAE     |
|           4 | john       | reinhardt |  25 | UK      |
|           2 | robert     | luna      |  22 | USA     |
|           3 | david      | robinson  |  22 | UK      |
+-------------+------------+-----------+-----+---------+
5 rows in set (0.00 sec)

mysql> select * from customer order by first_name ASC,age ASC;
+-------------+------------+-----------+-----+---------+
| customer_id | first_name | last_name | age | country |
+-------------+------------+-----------+-----+---------+
|           5 | betty      | doe       |  28 | UAE     |
|           3 | david      | robinson  |  22 | UK      |
|           4 | john       | reinhardt |  25 | UK      |
|           1 | john       | doe       |  31 | USA     |
|           2 | robert     | luna      |  22 | USA     |
+-------------+------------+-----------+-----+---------+
5 rows in set (0.00 sec)

mysql>
```

5.


```
mysql> select * from customer order by age ASC;
+-------------+------------+-----------+-----+---------+
| customer_id | first_name | last_name | age | country |
+-------------+------------+-----------+-----+---------+
|           2 | robert     | luna      |  22 | USA     |
|           3 | david      | robinson  |  22 | UK      |
|           4 | john       | reinhardt |  25 | UK      |
|           5 | betty      | doe       |  28 | UAE     |
|           1 | john       | doe       |  31 | USA     |
+-------------+------------+-----------+-----+---------+
5 rows in set (0.00 sec)

mysql> select * from customer order by age DESC;
+-------------+------------+-----------+-----+---------+
| customer_id | first_name | last_name | age | country |
+-------------+------------+-----------+-----+---------+
|           1 | john       | doe       |  31 | USA     |
|           5 | betty      | doe       |  28 | UAE     |
|           4 | john       | reinhardt |  25 | UK      |
|           2 | robert     | luna      |  22 | USA     |
|           3 | david      | robinson  |  22 | UK      |
+-------------+------------+-----------+-----+---------+
5 rows in set (0.00 sec)

mysql> select * from customer order by first_name ASC,age ASC;
+-------------+------------+-----------+-----+---------+
| customer_id | first_name | last_name | age | country |
+-------------+------------+-----------+-----+---------+
|           5 | betty      | doe       |  28 | UAE     |
|           3 | david      | robinson  |  22 | UK      |
|           4 | john       | reinhardt |  25 | UK      |
|           1 | john       | doe       |  31 | USA     |
|           2 | robert     | luna      |  22 | USA     |
+-------------+------------+-----------+-----+---------+
5 rows in set (0.00 sec)

mysql> select * from customer last_name,age,country from customer where country='UK' order by last_name;
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 'from customer where country='UK' order by last_name' at line 1
mysql> select last_name,age,country from customer where country='UK' order by last_name;
+-----------+-----+---------+
| last_name | age | country |
+-----------+-----+---------+
| reinhardt |  25 | UK      |
| robinson  |  22 | UK      |
+-----------+-----+---------+
2 rows in set (0.05 sec)

mysql>
```

6. FIRST_NAME ASC AGE DESC,FIRST_NAME DESC AGE ASC, LAST_NAME ASC AGE DESC,LAST_NAME
DESC AGE ASC


```
mysql> select country,count(country) from customer group by country ;
+---------+----------------+
| country | count(country) |
+---------+----------------+
| USA     |              2 |
| UK      |              2 |
| UAE     |              1 |
+---------+----------------+
3 rows in set (0.00 sec)
```

```
mysql> select country,count(country) from customer group by country having count(country)>1;
+---------+----------------+
| country | count(country) |
+---------+----------------+
| USA     |              2 |
| UK      |              2 |
+---------+----------------+
2 rows in set (0.00 sec)
```

EMP TABLE

```
mysql> create table emp(slno int,name varchar(25),age int,salary int);
Query OK, 0 rows affected (1.63 sec)

mysql> insert into emp values(1,'john',24,25000);
Query OK, 1 row affected (0.19 sec)

mysql> insert into emp values(2,'nick',22,22000),(3,'amara',25,15000),(4,'nick',22,22000),(5,'john',24,25000);
Query OK, 4 rows affected (0.11 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> select * from emp;
+------+-------+------+--------+
| slno | name  | age  | salary |
+------+-------+------+--------+
|    1 | john  |   24 |  25000 |
|    2 | nick  |   22 |  22000 |
|    3 | amara |   25 |  15000 |
|    4 | nick  |   22 |  22000 |
|    5 | john  |   24 |  25000 |
+------+-------+------+--------+
5 rows in set (0.00 sec)
```

FIND THE TOTAL SALARY OF EMPLOYEE GROUPING BY THE NAMES

```
mysql> select name,SUM(salary) AS total_salary from emp group by name;
+-------+--------------+
| name  | total_salary |
+-------+--------------+
| john  |        50000 |
| nick  |        44000 |
| amara |        15000 |
+-------+--------------+
3 rows in set (0.01 sec)
```

EMP1 TABLE

```
mysql> CRREATE TABLE EMP1(EMPID INT,EMPNAME VARCHAR(25),SALARY INT,CITY VARCHAR(20));
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 'CRREATE TABLE EMP1(EMPID INT,EMPNAME VARCHAR(25),SALARY INT,CITY VARCHAR(20))' at line 1
mysql> CREATE TABLE EMP1(EMPID INT,EMPNAME VARCHAR(25),SALARY INT,CITY VARCHAR(20));
Query OK, 0 rows affected (1.65 sec)

mysql> INSERT INTO EMP1 VALUES(101,'AAA',20000,'GOA'),(102,'BBB',40000,'DELHI'),(103,'CCC',80000,'JAIPUR'),(104,'DDD',20000,'GOA'),(105,'EEE',50000,'DELHI');
Query OK, 5 rows affected (0.19 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM EMP1;
+-------+---------+--------+--------+
| EMPID | EMPNAME | SALARY | CITY   |
+-------+---------+--------+--------+
|   101 | AAA     |  20000 | GOA    |
|   102 | BBB     |  40000 | DELHI  |
|   103 | CCC     |  80000 | JAIPUR |
|   104 | DDD     |  20000 | GOA    |
|   105 | EEE     |  50000 | DELHI  |
+-------+---------+--------+--------+
5 rows in set (0.00 sec)
```

```
mysql> SELECT CITY,SUM(SALARY) AS SUM_OF_SALARY FROM EMP1 GROUP BY CITY ;
+--------+---------------+
| CITY   | SUM_OF_SALARY |
+--------+---------------+
| GOA    |         40000 |
| DELHI  |         90000 |
| JAIPUR |         80000 |
+--------+---------------+
3 rows in set (0.00 sec)

mysql>
```

```
mysql> SELECT CITY,SUM(SALARY) AS SUM_SUM_SALARY FROM EMP1 GROUP BY CITY HAVING SUM(SALARY)>50000;
+--------+----------------+
| CITY   | SUM_SUM_SALARY |
+--------+----------------+
| DELHI  |          90000 |
| JAIPUR |          80000 |
+--------+----------------+
2 rows in set (0.03 sec)
```

```
Enter password: **********
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 21
Server version: 8.0.36 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE USER 'PRIYA'@'LOCALHOST' 'PASSWORD';
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 ''PASSWORD'' at line 1
mysql>  CREATE USER 'PRIYA'@'LOCALHOST' identified by 'PASSWORD';
Query OK, 0 rows affected (0.50 sec)

mysql> select user from MYSQL.user;
+------------------+
| user             |
+------------------+
| PRIYA            |
| mysql.infoschema |
| mysql.session    |
| mysql.sys        |
| root             |
+------------------+
5 rows in set (0.00 sec)

mysql> GRANT ALL PRIVILEGES ON db.*TO 'PRIYA'@'LOCALHOST';
Query OK, 0 rows affected (0.10 sec)

mysql> SHOW GRANTS FOR 'PRIYA'@'HOST';
ERROR 1141 (42000): There is no such grant defined for user 'PRIYA' on host 'host'
mysql>  SHOW GRANTS FOR 'PRIYA'@'LOCALHOST';
+----------------------------------------------------+
| Grants for PRIYA@localhost                         |
+----------------------------------------------------+
| GRANT USAGE ON *.* TO `PRIYA`@`localhost`          |
| GRANT ALL PRIVILEGES ON `db`.* TO `PRIYA`@`localhost` |
+----------------------------------------------------+
2 rows in set (0.00 sec)

mysql> CREATE USER 'RUCHITHA'@'LOCALHOST' IDENTIFIED BY'041202';
Query OK, 0 rows affected (0.18 sec)

mysql> SELECT USER FROM MySql.user;
+------------------+
| USER             |
```

```
mysql> SELECT USER FROM MySql.user;
+------------------+
| USER             |
+------------------+
| PRIYA            |
| RUCHITHA         |
| mysql.infoschema |
| mysql.session    |
| mysql.sys        |
| root             |
+------------------+
6 rows in set (0.00 sec)

mysql> GRANT ALL PRIVILEGES ON db.*TO 'RUCHITHA'@'LOCALHOST';
Query OK, 0 rows affected (0.10 sec)

mysql> SHOW GRANTS FOR 'RUCHITHA'@'LOCALHOST';
+----------------------------------------------------+
| Grants for RUCHITHA@localhost                      |
+----------------------------------------------------+
| GRANT USAGE ON *.* TO `RUCHITHA`@`localhost`       |
| GRANT ALL PRIVILEGES ON `db`.* TO `RUCHITHA`@`localhost` |
+----------------------------------------------------+
2 rows in set (0.00 sec)

mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| db                 |
| information_schema |
| mysql              |
| performance_schema |
| pes                |
| pesu               |
| sakila             |
| sys                |
| world              |
+--------------------+
9 rows in set (0.00 sec)

mysql> SHOW TABLES;
ERROR 1046 (3D000): No database selected
mysql> SHOW TABLES DB;
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 'DB' at line 1
mysql> SHOW TABLES db;
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 'db' at line 1
mysql> SHOW db TABLES;
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 'db TABLES' at line 1
```

```
MySQL 8.0 Command Line Client

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 'db' at line 1
mysql> SHOW db TABLES;
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 'db TABLES' at line 1
mysql> REVOKE privileges ON DB FROM PRIYA;
ERROR 1046 (3D000): No database selected
mysql> USE DB;
Database changed
mysql> REVOKE privileges ON DB FROM PRIYA;
ERROR 3619 (HY000): Illegal privilege level specified for db
mysql> USE PES;
Database changed
mysql>  REVOKE privileges ON PES FROM PRIYA;
ERROR 3619 (HY000): Illegal privilege level specified for pes
mysql> REVOKE ALL PRIVILEGES ON db.* FROM 'priya'@'localhost';
ERROR 1141 (42000): There is no such grant defined for user 'priya' on host 'localhost'
mysql> REVOKE ALL PRIVILEGES ON db.*FROM'priya'@'localhost';
ERROR 1141 (42000): There is no such grant defined for user 'priya' on host 'localhost'
mysql> REVOKE ALL PRIVILEGES ON DB.*FROM'priya'@'localhost';
ERROR 1141 (42000): There is no such grant defined for user 'priya' on host 'localhost'
mysql> REVOKE ALL PRIVILEGES ON PES.*FROM'priya'@'localhost';
ERROR 1141 (42000): There is no such grant defined for user 'priya' on host 'localhost'
mysql> REVOKE ALL PRIVILEGES ON PES.*FROM 'priya'@'localhost';
ERROR 1141 (42000): There is no such grant defined for user 'priya' on host 'localhost'
mysql>  REVOKE privileges ON DB FROM PRIYA;
ERROR 3619 (HY000): Illegal privilege level specified for db
mysql> REVOKE ALL PRIVILEGES ON PES.*FROM'RUCHITHA'@'localhost';
ERROR 1141 (42000): There is no such grant defined for user 'RUCHITHA' on host 'localhost'
mysql> REVOKE ALL PRIVILEGES ON db.*FROM'RUCHITHA'@'localhost';
Query OK, 0 rows affected (0.41 sec)

mysql> REVOKE ALL PRIVILEGES ON db.*FROM'PRIYA'@'LOCALHOST';
Query OK, 0 rows affected (0.43 sec)

mysql> drop user 'PRIYA'@'LOCALHOST';
Query OK, 0 rows affected (0.40 sec)

mysql>
```

```
...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 ''create table ex(eno int,ename varchar(29)' at line
mysql> create table stu11(SRN int, NAME varchar(20),MARKS int);
Query OK, 0 rows affected (0.44 sec)

mysql> insert into stu11 values(8,'aaa',450),(1,'bbb',390),(9,'fff',438),(5,'ddd',357),(10,'hhh',345),(2,'bbb',486),(6,'ccc',399),(7,'eee',354),(4,'ppp',450),(3,'ggg',398);
Query OK, 10 rows affected (0.00 sec)
Records: 10  Duplicates: 0  Warnings: 0

mysql> select * from stu11;
+------+------+-------+
| SRN  | NAME | MARKS |
+------+------+-------+
|    8 | aaa  |   450 |
|    1 | bbb  |   390 |
|    9 | fff  |   438 |
|    5 | ddd  |   357 |
|   10 | hhh  |   345 |
|    2 | bbb  |   486 |
|    6 | ccc  |   399 |
|    7 | eee  |   354 |
|    4 | ppp  |   450 |
|    3 | ggg  |   398 |
+------+------+-------+
10 rows in set (0.00 sec)
```

```
mysql> select * from stu11 where SRN=10;
+------+------+-------+
| SRN  | NAME | MARKS |
+------+------+-------+
|   10 | hhh  |   345 |
+------+------+-------+
1 row in set (0.00 sec)

mysql> create index index_stu11 on std11(SRN);
ERROR 1146 (42S02): Table 'pes.std11' doesn't exist
mysql>  create index index_stu11 on stu11(SRN);
Query OK, 0 rows affected (0.84 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> explain select * from stu11 where SRN=100;
+----+-------------+-------+------------+------+---------------+-------------+---------+-------+------+----------+-------+
| id | select_type | table | partitions | type | possible_keys | key         | key_len | ref   | rows | filtered | Extra |
+----+-------------+-------+------------+------+---------------+-------------+---------+-------+------+----------+-------+
|  1 | SIMPLE      | stu11 | NULL       | ref  | index_stu11   | index_stu11 | 5       | const |    1 |   100.00 | NULL  |
+----+-------------+-------+------------+------+---------------+-------------+---------+-------+------+----------+-------+
1 row in set, 1 warning (0.09 sec)
```

```
mysql> craete table cust(cus_id int,fname varchar(20));
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 'craete table cust(cus_id int,fname varchar(20))' at line 1
mysql>  create table cust(cus_id int,fname varchar(20));
Query OK, 0 rows affected (2.23 sec)

mysql> insert into cust values(1,'john'),(2,'robert'),(3,'david'),(4,'john'),(5,'betty');
Query OK, 5 rows affected (0.07 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from cust;
+--------+--------+
| cus_id | fname  |
+--------+--------+
|      1 | john   |
|      2 | robert |
|      3 | david  |
|      4 | john   |
|      5 | betty  |
+--------+--------+
5 rows in set (0.00 sec)
```

```
mysql> create table orders(order_id int,amount int, customer int);
Query OK, 0 rows affected (0.40 sec)

mysql> insert into orders(1,200,10),(2,500,3),(3,300,6),(4,800,5),(5,150,8);
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 '1,200,10),(2,500,3),(3,300,6),(4,800,5),(5,150,8)' at line 1
mysql>  insert into orders values(1,200,10),(2,500,3),(3,300,6),(4,800,5),(5,150,8);
Query OK, 5 rows affected (0.12 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from orders;
+----------+--------+----------+
| order_id | amount | customer |
+----------+--------+----------+
|        1 |    200 |       10 |
|        2 |    500 |        3 |
|        3 |    300 |        6 |
|        4 |    800 |        5 |
|        5 |    150 |        8 |
+----------+--------+----------+
5 rows in set (0.00 sec)
```

join

```
ERROR 1054 (42S22): Unknown column 'cust.cust_id' in 'on clause'
mysql>  select cust.cus_id,cust.fname,orders.amount FROM cust join orders ON cust.cus_id=orders.customer;
+--------+-------+--------+
| cus_id | fname | amount |
+--------+-------+--------+
|      3 | david |    500 |
|      5 | betty |    800 |
+--------+-------+--------+
2 rows in set (0.03 sec)
```

Inner join

```
mysql> select cust.cus_id,cust.fname,orders.amount FROM cust inner join orders ON cust.cus_id=orders.customer;
+--------+-------+--------+
| cus_id | fname | amount |
+--------+-------+--------+
|      3 | david |    500 |
|      5 | betty |    800 |
+--------+-------+--------+
2 rows in set (0.00 sec)
```

Inner join with where clause

```
mysql> select cust.cus_id,cust.fname,orders.amount FROM cust inner join orders on cust.cus_id=orders.customer where orders.amount>500;
+--------+-------+--------+
| cus_id | fname | amount |
+--------+-------+--------+
|      5 | betty |    800 |
+--------+-------+--------+
1 row in set (0.00 sec)
```

Using as

```
mysql> select c.cus_id,c.fname,o.amount from cust as c join orders as o on c.cus_id=o.customer;
+--------+-------+--------+
| cus_id | fname | amount |
+--------+-------+--------+
|      3 | david |    500 |
|      5 | betty |    800 |
+--------+-------+--------+
2 rows in set (0.00 sec)
```

Using left join

```
mysql> select cust.cus_id,cust.fname,orders.amount from cust left join orders on cust.cus_id=orders.customer;
+--------+--------+--------+
| cus_id | fname  | amount |
+--------+--------+--------+
|      1 | john   |   NULL |
|      2 | robert |   NULL |
|      3 | david  |    500 |
|      4 | john   |   NULL |
|      5 | betty  |    800 |
+--------+--------+--------+
5 rows in set (0.00 sec)
```

Right join

```
mysql>  select cust.cus_id,cust.fname,orders.amount from cust right join orders on cust.cus_id=orders.customer;
+--------+-------+--------+
| cus_id | fname | amount |
+--------+-------+--------+
|   NULL | NULL  |    200 |
|      3 | david |    500 |
|   NULL | NULL  |    300 |
|      5 | betty |    800 |
|   NULL | NULL  |    150 |
+--------+-------+--------+
5 rows in set (0.00 sec)
```

Left and right outer join

```
mysql>  select cust.cus_id,cust.fname,orders.amount from cust right outer join orders on cust.cus_id=orders.customer;
+--------+-------+--------+
| cus_id | fname | amount |
+--------+-------+--------+
|   NULL | NULL  |    200 |
|      3 | david |    500 |
|   NULL | NULL  |    300 |
|      5 | betty |    800 |
|   NULL | NULL  |    150 |
+--------+-------+--------+
5 rows in set (0.00 sec)

mysql>  select cust.cus_id,cust.fname,orders.amount from cust left join orders on cust.cus_id=orders.customer;
+--------+--------+--------+
| cus_id | fname  | amount |
+--------+--------+--------+
|      1 | john   |   NULL |
|      2 | robert |   NULL |
|      3 | david  |    500 |
|      4 | john   |   NULL |
|      5 | betty  |    800 |
+--------+--------+--------+
5 rows in set (0.00 sec)
```

Cross join

```
mysql> select cust.cus_id,cust.fname,orders.amount from cust cross join orders on cust.cus_id=orders.customer;
+--------+-------+--------+
| cus_id | fname | amount |
+--------+-------+--------+
|      3 | david |    500 |
|      5 | betty |    800 |
+--------+-------+--------+
2 rows in set (0.00 sec)
```

SALES PERFORMANCE TABLE

```
mysql> select * from sales_performance;
+----------------+----------+-----------+------------------+--------------+
| sales_person_id | name    | territory | total_sales_value | joining_date |
+----------------+----------+-----------+------------------+--------------+
|           2333 | gregorio | bavaria   |             19220 | 2021-09-21   |
+----------------+----------+-----------+------------------+--------------+
1 row in set (0.00 sec)

mysql> insert into sales_performance values(4323,'aaron','london',320000,'2018-01-10');
Query OK, 1 row affected (0.12 sec)

mysql> insert into sales_performance values(1113,'sebestian','london',32433,'2020-10-31');
Query OK, 1 row affected (0.07 sec)

mysql> insert into sales_performance values(4134,'pierse','paris',21214,'2020-09-01');
Query OK, 1 row affected (0.08 sec)

mysql> select * from sales_performance;
+----------------+-----------+-----------+------------------+--------------+
| sales_person_id | name     | territory | total_sales_value | joining_date |
+----------------+-----------+-----------+------------------+--------------+
|           2333 | gregorio  | bavaria   |             19220 | 2021-09-21   |
|           4323 | aaron     | london    |            320000 | 2018-01-10   |
|           1113 | sebestian | london    |             32433 | 2020-10-31   |
|           4134 | pierse    | paris     |             21214 | 2020-09-01   |
+----------------+-----------+-----------+------------------+--------------+
4 rows in set (0.00 sec)
```

1.LIST ALL THE RECORDS BY sales_person_id

```
mysql> select * from sales_performance order by sales_person_id ASC;
+----------------+-----------+-----------+------------------+--------------+
| sales_person_id | name     | territory | total_sales_value | joining_date |
+----------------+-----------+-----------+------------------+--------------+
|           1113 | sebestian | london    |             32433 | 2020-10-31   |
|           2333 | gregorio  | bavaria   |             19220 | 2021-09-21   |
|           4134 | pierse    | paris     |             21214 | 2020-09-01   |
|           4323 | aaron     | london    |            320000 | 2018-01-10   |
+----------------+-----------+-----------+------------------+--------------+
4 rows in set (0.00 sec)

mysql>
```

2. LIST ALL RECORDS BY TEXT VALUE

```
mysql> select * from sales_performance order by name ASC,territory ASC;
+----------------+-----------+-----------+-------------------+--------------+
| sales_person_id | name     | territory | total_sales_value | joining_date |
+----------------+-----------+-----------+-------------------+--------------+
|           4323 | aaron     | london    |            320000 | 2018-01-10   |
|           2333 | gregorio  | bavaria   |             19220 | 2021-09-21   |
|           4134 | pierse    | paris     |             21214 | 2020-09-01   |
|           1113 | sebestian | london    |             32433 | 2020-10-31   |
+----------------+-----------+-----------+-------------------+--------------+
4 rows in set (0.00 sec)
```

3. LIST THE DETAILS OF SALES PERFORMANCE BY DATE (total_sales_value)

```
mysql> SELECT * FROM sales_performance order by total_sales_value ASC;
+----------------+-----------+-----------+-------------------+--------------+
| sales_person_id | name     | territory | total_sales_value | joining_date |
+----------------+-----------+-----------+-------------------+--------------+
|           2333 | gregorio  | bavaria   |             19220 | 2021-09-21   |
|           4134 | pierse    | paris     |             21214 | 2020-09-01   |
|           1113 | sebestian | london    |             32433 | 2020-10-31   |
|           4323 | aaron     | london    |            320000 | 2018-01-10   |
+----------------+-----------+-----------+-------------------+--------------+
4 rows in set (0.00 sec)
```

4. SORT THE RECORDS BY TERITTORY BY DESCENDING AND NAME BY ASCENDING

```
mysql> SELECT * FROM sales_performance order by territory DESC,name ASC;
+----------------+-----------+-----------+-------------------+--------------+
| sales_person_id | name     | territory | total_sales_value | joining_date |
+----------------+-----------+-----------+-------------------+--------------+
|           4134 | pierse    | paris     |             21214 | 2020-09-01   |
|           4323 | aaron     | london    |            320000 | 2018-01-10   |
|           1113 | sebestian | london    |             32433 | 2020-10-31   |
|           2333 | gregorio  | bavaria   |             19220 | 2021-09-21   |
+----------------+-----------+-----------+-------------------+--------------+
4 rows in set (0.00 sec)
```

STUDENT1 TABLE

```
mysql> CREATE TABLE STUDENT1(SUBJECT VARCHAR(25),YEAR INT,NAME VARCHAR(25));
Query OK, 0 rows affected (0.78 sec)

mysql> INSERT INTO STUDENT1 VALUES('C',2,'JOHN');
Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO STUDENT1 VALUES('C',2,'JIMMY'),('C',2,'JASMEEN'),('C',3,'NICK'),('C',3,'AMARA'),('JAVA',1,'SIFA'),('JAVA',1,'DOLLY');
Query OK, 6 rows affected (0.10 sec)
Records: 6  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM STUDENT1;
+---------+------+---------+
| SUBJECT | YEAR | NAME    |
+---------+------+---------+
| C       |    2 | JOHN    |
| C       |    2 | JIMMY   |
| C       |    2 | JASMEEN |
| C       |    3 | NICK    |
| C       |    3 | AMARA   |
| JAVA    |    1 | SIFA    |
| JAVA    |    1 | DOLLY   |
+---------+------+---------+
7 rows in set (0.00 sec)
```

```
mysql> SELECT SUBJECT,YEAR,COUNT(NAME) AS NO_OF_STUDENTS FROM STUDENT1 GROUP BY SUBJECT,YEAR;
+---------+------+----------------+
| SUBJECT | YEAR | NO_OF_STUDENTS |
+---------+------+----------------+
| C       |    2 |              3 |
| C       |    3 |              2 |
| JAVA    |    1 |              2 |
+---------+------+----------------+
3 rows in set (0.02 sec)
```

View table

```
mysql> CREATE TABLE student(std_id int,name varchar(20),age int,address varchar(20));
Query OK, 0 rows affected (1.30 sec)

mysql> desc student;
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| std_id  | int         | YES  |     | NULL    |       |
| name    | varchar(20) | YES  |     | NULL    |       |
| age     | int         | YES  |     | NULL    |       |
| address | varchar(20) | YES  |     | NULL    |       |
+---------+-------------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> insert into student values(101,'AAA',20,'banglore');
Query OK, 1 row affected (0.23 sec)

mysql> insert into student values(102,'BBB',21,'banglore'),(103,'CCC',21,'banglore'),(104,'DDD',20,'mumbai'),(105,'EEE',21,'delhi');
Query OK, 4 rows affected (0.10 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> select * from student;
+--------+------+------+----------+
| std_id | name | age  | address  |
+--------+------+------+----------+
|    101 | AAA  |   20 | banglore |
|    102 | BBB  |   21 | banglore |
|    103 | CCC  |   21 | banglore |
|    104 | DDD  |   20 | mumbai   |
|    105 | EEE  |   21 | delhi    |
+--------+------+------+----------+
5 rows in set (0.00 sec)
```

```
mysql> create table marks(result varchar
    -> ;
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 '' at line 1
mysql> create table marks(result varchar(20),m1 int,m2 int,m3 int,foreign key(std_id) references std(std_id));
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 'std(std_id))' at line 1
mysql>  create table marks(result varchar(20),m1 int,m2 int,m3 int,foreign key(std_id) references student(std_id));
ERROR 1072 (42000): Key column 'std_id' doesn't exist in table
mysql>  create table marks(result varchar(20),m1 int,m2 int,m3 int,std_id);
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 ')' at line 1
mysql> create table marks(result varchar(20),m1 int,m2 int,m3 int,std_id int);
Query OK, 0 rows affected (0.77 sec)

mysql> desc student;
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| std_id  | int         | YES  |     | NULL    |       |
| name    | varchar(20) | YES  |     | NULL    |       |
| age     | int         | YES  |     | NULL    |       |
| address | varchar(20) | YES  |     | NULL    |       |
+---------+-------------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> desc marks;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| result | varchar(20) | YES  |     | NULL    |       |
| m1     | int         | YES  |     | NULL    |       |
| m2     | int         | YES  |     | NULL    |       |
| m3     | int         | YES  |     | NULL    |       |
| std_id | int         | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```

```
mysql> insert into marks value('pass',60,70,90,101);
Query OK, 1 row affected (0.05 sec)

mysql> insert into marks values('fail',20,8,10,102),('pass',90,90,80,103),('pass',70,87,68,104),('pass',98,100,99);
ERROR 1136 (21S01): Column count doesn't match value count at row 4
mysql>  insert into marks values('fail',20,8,10,102),('pass',90,90,80,103),('pass',70,87,68,104),('pass',98,100,99,105);
Query OK, 4 rows affected (0.26 sec)
Records: 4  Duplicates: 0  Warnings: 0

mysql> select * from marks;
+--------+------+------+------+--------+
| result | m1   | m2   | m3   | std_id |
+--------+------+------+------+--------+
| pass   |   60 |   70 |   90 |    101 |
| fail   |   20 |    8 |   10 |    102 |
| pass   |   90 |   90 |   80 |    103 |
| pass   |   70 |   87 |   68 |    104 |
| pass   |   98 |  100 |   99 |    105 |
+--------+------+------+------+--------+
5 rows in set (0.00 sec)
```

```
mysql> CREATE VIEW marksview AS SELECT student.std_id,student.address,marks.result from student,marks WHERE student.std_id=marks.std_id;
Query OK, 0 rows affected (0.10 sec)

mysql> select * from marksview;
+--------+----------+--------+
| std_id | address  | result |
+--------+----------+--------+
|    101 | banglore | pass   |
|    102 | banglore | fail   |
|    103 | banglore | pass   |
|    104 | mumbai   | pass   |
|    105 | delhi    | pass   |
+--------+----------+--------+
5 rows in set (0.05 sec)
```

```
mysql> select m1,m2,m3 from marks order by m1 desc;
+------+------+------+
| m1   | m2   | m3   |
+------+------+------+
|   98 |  100 |   99 |
|   90 |   90 |   80 |
|   70 |   87 |   68 |
|   60 |   70 |   90 |
|   20 |    8 |   10 |
+------+------+------+
5 rows in set (0.00 sec)
```

```
mysql> select * from marks WHERE result='fail';
+--------+------+------+------+--------+
| result | m1   | m2   | m3   | std_id |
+--------+------+------+------+--------+
| fail   |   20 |    8 |   10 |    102 |
+--------+------+------+------+--------+
1 row in set (0.00 sec)

mysql>
```

```
mysql> select max(m1) from marks;
+---------+
| max(m1) |
+---------+
|      98 |
+---------+
1 row in set (0.00 sec)

mysql> select max(m2) from marks;
+---------+
| max(m2) |
+---------+
|     100 |
+---------+
1 row in set (0.00 sec)

mysql> select max(m3) from marks;
+---------+
| max(m3) |
+---------+
|      99 |
+---------+
1 row in set (0.00 sec)
```

```
mysql> select min(m1) from marks;
+---------+
| min(m1) |
+---------+
|      20 |
+---------+
1 row in set (0.00 sec)

mysql> select min(m2);
ERROR 1054 (42S22): Unknown column 'm2' in 'field list'
mysql> select min(m2) from marks;
+---------+
| min(m2) |
+---------+
|       8 |
+---------+
1 row in set (0.00 sec)

mysql> select min(m3) from marks;
+---------+
| min(m3) |
+---------+
|      10 |
+---------+
1 row in set (0.00 sec)
```

```
mysql> select count(result) from  marks where result='fail';
+---------------+
| count(result) |
+---------------+
|             1 |
+---------------+
1 row in set (0.00 sec)

mysql>  select count(result) from  marks where result='pass';
+---------------+
| count(result) |
+---------------+
|             4 |
+---------------+
1 row in set (0.00 sec)

mysql>
```