* Alter(insert, delete, modify)
* Truncate(without removing structure of table)

Day 1:-

**Enter password: \*\*\*\*\*\*\*\*\***

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 16

Server version: 8.0.40 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> show databases;**

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

| Database |

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

| information\_schema |

| mysql |

| performance\_schema |

| sys |

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

4 rows in set (0.11 sec)

**mysql> create database Detail\_1;**

Query OK, 1 row affected (0.04 sec)

mysql> show databases;

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

| Database |

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

| detail\_1 |

| information\_schema |

| mysql |

| performance\_schema |

| sys |

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

5 rows in set (0.00 sec)

**mysql> use Detail\_1;**

Database changed

* **mysql> create table Student (Roll\_No int primary key, Name varchar(40), Mobile\_No bigint, DOB date);**

Query OK, 0 rows affected (0.11 sec)

**mysql> insert into student values(1, "Drashti", 1234567890, "2204-06-12");**

Query OK, 1 row affected (0.02 sec)

**mysql> select \* from student;**

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

| Roll\_No | Name | Mobile\_No | DOB |

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

| 1 | Drashti | 1234567890 | 2204-06-12 |

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

1 row in set (0.00 sec)

**mysql> insert into student (Roll\_No, Name, Mobile\_No, DOB) values(2, "Mayuri", 3452167098, "2000-07-01"), (3, "Sejal", 9909449049, "1914-11-30"), (4, "Usha", 9979849023, "1970-12-03");**

Query OK, 3 rows affected (0.04 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select \* from student;

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

| Roll\_No | Name | Mobile\_No | DOB |

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

| 1 | Drashti | 1234567890 | 2204-06-12 |

| 2 | Mayuri | 3452167098 | 2000-07-01 |

| 3 | Sejal | 9909449049 | 1914-11-30 |

| 4 | Usha | 9979849023 | 1970-12-03 |

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

4 rows in set (0.00 sec)

Day 2:-

mysql> show databases;

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

| Database |

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

| detail\_1 |

| information\_schema |

| mysql |

| performance\_schema |

| sys |

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

5 rows in set (0.01 sec)

mysql> use detail\_1;

Database changed

**mysql> show tables;**

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

| Tables\_in\_detail\_1 |

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

| student |

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

1 row in set (0.05 sec)

mysql> select \* from student;

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

| Roll\_No | Name | Mobile\_No | DOB |

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

| 1 | Drashti | 1234567890 | 2204-06-12 |

| 2 | Mayuri | 3452167098 | 2000-07-01 |

| 3 | Sejal | 9909449049 | 1914-11-30 |

| 4 | Usha | 9979849023 | 1970-12-03 |

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

4 rows in set (0.00 sec)

**mysql> alter table student add column city varchar(20);**

Query OK, 0 rows affected (0.04 sec)

Records: 0 Duplicates: 0 Warnings: 0

**mysql> describe student;**

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

| Field | Type | Null | Key | Default | Extra |

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

| Roll\_No | int | NO | PRI | NULL | |

| Name | varchar(40) | YES | | NULL | |

| Mobile\_No | bigint | YES | | NULL | |

| DOB | date | YES | | NULL | |

| city | varchar(20) | YES | | NULL | |

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

5 rows in set (0.01 sec)

mysql> select \* from student;

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

| Roll\_No | Name | Mobile\_No | DOB | city |

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

| 1 | Drashti | 1234567890 | 2204-06-12 | NULL |

| 2 | Mayuri | 3452167098 | 2000-07-01 | NULL |

| 3 | Sejal | 9909449049 | 1914-11-30 | NULL |

| 4 | Usha | 9979849023 | 1970-12-03 | NULL |

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

4 rows in set (0.00 sec)

**mysql> update student set city="Surat" where Roll\_No=1;**

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update student set city="Vapi" where Roll\_No=2;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update student set city="Kim" where Roll\_No=3;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update student set city="Ahmedabad" where Roll\_No=4;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from student;

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

| Roll\_No | Name | Mobile\_No | DOB | city |

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

| 1 | Drashti | 1234567890 | 2204-06-12 | Surat |

| 2 | Mayuri | 3452167098 | 2000-07-01 | Vapi |

| 3 | Sejal | 9909449049 | 1914-11-30 | Kim |

| 4 | Usha | 9979849023 | 1970-12-03 | Ahmedabad |

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

4 rows in set (0.00 sec)

**mysql> alter table student add column age int after name;**

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from student;

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

| Roll\_No | Name | age | Mobile\_No | DOB | city |

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

| 1 | Drashti | NULL | 1234567890 | 2204-06-12 | Surat |

| 2 | Mayuri | NULL | 3452167098 | 2000-07-01 | Vapi |

| 3 | Sejal | NULL | 9909449049 | 1914-11-30 | Kim |

| 4 | Usha | NULL | 9979849023 | 1970-12-03 | Ahmedabad |

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

4 rows in set (0.00 sec)

**mysql> alter table student modify age tinyint;**

Query OK, 4 rows affected (0.06 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> describe student;

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

| Field | Type | Null | Key | Default | Extra |

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

| Roll\_No | int | NO | PRI | NULL | |

| Name | varchar(40) | YES | | NULL | |

| age | tinyint | YES | | NULL | |

| Mobile\_No | bigint | YES | | NULL | |

| DOB | date | YES | | NULL | |

| city | varchar(20) | YES | | NULL | |

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

6 rows in set (0.00 sec)

mysql> update student set age=12 where Roll\_No=1;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update student set age=30 where Roll\_No=2;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update student set age=56 where Roll\_No=3;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update student set age=43 where Roll\_No=4;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from student;

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

| Roll\_No | Name | age | Mobile\_No | DOB | city |

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

| 1 | Drashti | 12 | 1234567890 | 2204-06-12 | Surat |

| 2 | Mayuri | 30 | 3452167098 | 2000-07-01 | Vapi |

| 3 | Sejal | 56 | 9909449049 | 1914-11-30 | Kim |

| 4 | Usha | 43 | 9979849023 | 1970-12-03 | Ahmedabad |

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

4 rows in set (0.00 sec)

**mysql> alter table student drop age;**

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from student;

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

| Roll\_No | Name | Mobile\_No | DOB | city |

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

| 1 | Drashti | 1234567890 | 2204-06-12 | Surat |

| 2 | Mayuri | 3452167098 | 2000-07-01 | Vapi |

| 3 | Sejal | 9909449049 | 1914-11-30 | Kim |

| 4 | Usha | 9979849023 | 1970-12-03 | Ahmedabad |

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

4 rows in set (0.00 sec)

**mysql> delete from student where Roll\_No=2;**

Query OK, 1 row affected (0.01 sec)

mysql> select \* from student;

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

| Roll\_No | Name | Mobile\_No | DOB | city |

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

| 1 | Drashti | 1234567890 | 2204-06-12 | Surat |

| 3 | Sejal | 9909449049 | 1914-11-30 | Kim |

| 4 | Usha | 9979849023 | 1970-12-03 | Ahmedabad |

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

3 rows in set (0.00 sec)

* **mysql> create table Teacher (ID int primary key, Name varchar(40), Mobile\_No bigint);**

Query OK, 0 rows affected (0.02 sec)

mysql> describe Teacher;

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

| Field | Type | Null | Key | Default | Extra |

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

| ID | int | NO | PRI | NULL | |

| Name | varchar(40) | YES | | NULL | |

| Mobile\_No | bigint | YES | | NULL | |

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

3 rows in set (0.00 sec)

mysql> insert into Teacher (ID, Name, Mobile\_No) values(1, "Mayuri", 3452167098), (2, "Sejal", 9909449049), (3, "Usha", 9979849023);

Query OK, 3 rows affected (0.01 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select \* from Teacher;

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

| ID | Name | Mobile\_No |

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

| 1 | Mayuri | 3452167098 |

| 2 | Sejal | 9909449049 |

| 3 | Usha | 9979849023 |

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

3 rows in set (0.00 sec)

**mysql> drop table Teacher;**

Query OK, 0 rows affected (0.12 sec)

mysql> select \* from Teacher;

ERROR 1146 (42S02): Table 'detail\_1.teacher' doesn't exist

Day 3:

* **mysql> create table Customer (C\_ID int primary key, Name varchar(40) not null, Mobile\_No bigint unique, city varchar(40) default "Surat", Age int check(Age>18));**

Query OK, 0 rows affected (0.04 sec)

mysql> describe Customer;

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

| Field | Type | Null | Key | Default | Extra |

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

| C\_ID | int | NO | PRI | NULL | |

| Name | varchar(40) | NO | | NULL | |

| Mobile\_No | bigint | YES | UNI | NULL | |

| city | varchar(40) | YES | | Surat | |

| Age | int | YES | | NULL | |

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

5 rows in set (0.00 sec)

mysql> insert into Customer (C\_ID, Name, Mobile\_No, City, Age) values(1, "Drashti", 982375893, "Surat", 21), (2, "Sejal", 9909823452, "Vapi", 24), (3, "Anjana", 1147902374, "Navsari", 40), (4, "Daizy", 9909232772, "Surat", 19), (5, "Jay", 982375883, "Surat", 35), (6, "Tina", 9909823562, "Kim", 22), (7, "Priya", 1147902334, "Navsari", 30), (8, "Raj", 8909232772, "Vapi", 20);

Query OK, 4 rows affected (0.00 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> select \* from Customer;

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 1 | Drashti | 982375893 | Surat | 21 |

| 2 | Sejal | 9909823452 | Vapi | 24 |

| 3 | Anjana | 1147902374 | Navsari | 40 |

| 4 | Daizy | 9909232772 | Surat | 19 |

| 5 | Jay | 982375883 | Surat | 35 |

| 6 | Tina | 9909823562 | Kim | 22 |

| 7 | Priya | 1147902334 | Navsari | 30 |

| 8 | Raj | 8909232772 | Vapi | 20 |

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

8 rows in set (0.00 sec)

**mysql> select \* from Customer where city="Surat";**

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 1 | Drashti | 982375893 | Surat | 21 |

| 4 | Daizy | 9909232772 | Surat | 19 |

| 5 | Jay | 982375883 | Surat | 35 |

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

3 rows in set (0.00 sec)

**mysql> select Name, City, Mobile\_No, Age from Customer where city="Surat" and age>=20;**

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

| Name | City | Mobile\_No | Age |

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

| Drashti | Surat | 982375893 | 21 |

| Jay | Surat | 982375883 | 35 |

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

2 rows in set (0.00 sec)

**mysql> select Name, City, Mobile\_No, Age from Customer where city="Surat" and age<=20;**

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

| Name | City | Mobile\_No | Age |

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

| Daizy | Surat | 9909232772 | 19 |

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

1 row in set (0.00 sec)

**mysql> select Name, City, Mobile\_No, Age from Customer where city="Surat" or age<=20;**

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

| Name | City | Mobile\_No | Age |

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

| Drashti | Surat | 982375893 | 21 |

| Daizy | Surat | 9909232772 | 19 |

| Jay | Surat | 982375883 | 35 |

| Raj | Vapi | 8909232772 | 20 |

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

4 rows in set (0.00 sec)

**mysql> select Name, City, Mobile\_No, Age from Customer where city="Surat" or age<=20 or city="Kim";**

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

| Name | City | Mobile\_No | Age |

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

| Drashti | Surat | 982375893 | 21 |

| Daizy | Surat | 9909232772 | 19 |

| Jay | Surat | 982375883 | 35 |

| Tina | Kim | 9909823562 | 22 |

| Raj | Vapi | 8909232772 | 20 |

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

5 rows in set (0.00 sec)

**mysql> select \* from Customer where city !="Surat";**

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 2 | Sejal | 9909823452 | Vapi | 24 |

| 3 | Anjana | 1147902374 | Navsari | 40 |

| 6 | Tina | 9909823562 | Kim | 22 |

| 7 | Priya | 1147902334 | Navsari | 30 |

| 8 | Raj | 8909232772 | Vapi | 20 |

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

5 rows in set (0.00 sec)

**mysql> select distinct city from Customer;**

+---------+

| city |

+---------+

| Surat |

| Vapi |

| Navsari |

| Kim |

+---------+

4 rows in set (0.00 sec)

**mysql> select \* from customer limit 3;**

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 1 | Drashti | 982375893 | Surat | 21 |

| 2 | Sejal | 9909823452 | Vapi | 24 |

| 3 | Anjana | 1147902374 | Navsari | 40 |

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

3 rows in set (0.00 sec)

**mysql> select \* from customer limit 3 offset 3;**

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 4 | Daizy | 9909232772 | Surat | 19 |

| 5 | Jay | 982375883 | Surat | 35 |

| 6 | Tina | 9909823562 | Kim | 22 |

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

3 rows in set (0.00 sec)

**mysql> select Name, City, Mobile\_No, Age from Customer where age between 20 and 30;**

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

| Name | City | Mobile\_No | Age |

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

| Drashti | Surat | 982375893 | 21 |

| Sejal | Vapi | 9909823452 | 24 |

| Tina | Kim | 9909823562 | 22 |

| Priya | Navsari | 1147902334 | 30 |

| Raj | Vapi | 8909232772 | 20 |

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

5 rows in set (0.00 sec)

**mysql> select Name, City, Mobile\_No, Age from Customer where age not between 20 and 30;**

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

| Name | City | Mobile\_No | Age |

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

| Anjana | Navsari | 1147902374 | 40 |

| Daizy | Surat | 9909232772 | 19 |

| Jay | Surat | 982375883 | 35 |

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

3 rows in set (0.00 sec)

**mysql> select \* from Customer where city in ("Surat", "Vapi");**

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 1 | Drashti | 982375893 | Surat | 21 |

| 2 | Sejal | 9909823452 | Vapi | 24 |

| 4 | Daizy | 9909232772 | Surat | 19 |

| 5 | Jay | 982375883 | Surat | 35 |

| 8 | Raj | 8909232772 | Vapi | 20 |

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

5 rows in set (0.00 sec)

**mysql> select \* from Customer where city not in ("Surat", "Vapi");**

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 3 | Anjana | 1147902374 | Navsari | 40 |

| 6 | Tina | 9909823562 | Kim | 22 |

| 7 | Priya | 1147902334 | Navsari | 30 |

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

3 rows in set (0.00 sec)

**mysql> select \* from Customer where name like '%a';**

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 3 | Anjana | 1147902374 | Navsari | 40 |

| 6 | Tina | 9909823562 | Kim | 22 |

| 7 | Priya | 1147902334 | Navsari | 30 |

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

3 rows in set (0.00 sec)

mysql> select \* from Customer where name like 'a%';

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 3 | Anjana | 1147902374 | Navsari | 40 |

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

1 row in set (0.00 sec)

mysql> select \* from Customer where name like '\_a%';

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 4 | Daizy | 9909232772 | Surat | 19 |

| 5 | Jay | 982375883 | Surat | 35 |

| 8 | Raj | 8909232772 | Vapi | 20 |

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

3 rows in set (0.00 sec)

mysql> select \* from Customer where name like '\_a\_%';

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 4 | Daizy | 9909232772 | Surat | 19 |

| 5 | Jay | 982375883 | Surat | 35 |

| 8 | Raj | 8909232772 | Vapi | 20 |

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

3 rows in set (0.00 sec)

**mysql> select \* from Customer order by Name ASC;**

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 3 | Anjana | 1147902374 | Navsari | 40 |

| 4 | Daizy | 9909232772 | Surat | 19 |

| 1 | Drashti | 982375893 | Surat | 21 |

| 5 | Jay | 982375883 | Surat | 35 |

| 7 | Priya | 1147902334 | Navsari | 30 |

| 8 | Raj | 8909232772 | Vapi | 20 |

| 2 | Sejal | 9909823452 | Vapi | 24 |

| 6 | Tina | 9909823562 | Kim | 22 |

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

8 rows in set (0.00 sec)

**mysql> select \* from Customer order by Name DESC;**

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

| C\_ID | Name | Mobile\_No | city | Age |

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

| 6 | Tina | 9909823562 | Kim | 22 |

| 2 | Sejal | 9909823452 | Vapi | 24 |

| 8 | Raj | 8909232772 | Vapi | 20 |

| 7 | Priya | 1147902334 | Navsari | 30 |

| 5 | Jay | 982375883 | Surat | 35 |

| 1 | Drashti | 982375893 | Surat | 21 |

| 4 | Daizy | 9909232772 | Surat | 19 |

| 3 | Anjana | 1147902374 | Navsari | 40 |

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

8 rows in set (0.00 sec)

**mysql> select max(Age) from Customer;**

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

| max(Age) |

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

| 40 |

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

1 row in set (0.00 sec)

**mysql> select max(Age) as Maximum\_Age from Customer;**

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

| Maximum\_Age |

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

| 40 |

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

1 row in set (0.00 sec)

**mysql> select min(Age) from Customer;**

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

| min(Age) |

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

| 19 |

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

1 row in set (0.00 sec)

**mysql> select min(Age) as Minimum\_Age from Customer;**

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

| Minimum\_Age |

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

| 19 |

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

1 row in set (0.00 sec)

**mysql> select count(Name) from Customer where Name like 'a%';**

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

| count(Name) |

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

| 1 |

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

1 row in set (0.00 sec)

**mysql> select count(C\_ID) as Total\_Row from Customer;**

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

| Total\_Row |

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

| 8 |

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

1 row in set (0.00 sec)

**mysql> select sum(Pay\_Amount) as Total\_Amount from Payment;**

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

| Total\_Amount |

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

| 180400 |

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

1 row in set (0.00 sec)

**mysql> select avg(Pay\_Amount) as Avg\_Amount from Payment;**

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

| Avg\_Amount |

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

| 22550.0000 |

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

**CREATE USER 'User\_1'@'localhost' IDENTIFIED BY 'PWD\_1';**

**CREATE USER 'User\_2'@'localhost' IDENTIFIED BY 'PWD\_2';**

**GRANT SELECT, INSERT ON Detail\_1.customer to 'User\_1'@'localhost';**

**GRANT SELECT ON Detail\_1.customer to 'User\_2'@'localhost';**

**REVOKE SELECT ON Detail\_1.customer FROM 'User\_1'@'localhost';**

**SHOW GRANTS for 'User\_1'@'localhost';**

**-- GROUP BY AND HAVING CLAUSE**

**SELECT COUNT(C\_ID), city FROM Customer GROUP BY city HAVING COUNT(C\_ID) > 2 ORDER BY COUNT(C\_ID) DESC;**

* **mysql> create table Payment (Pay\_ID int primary key, CID int, foreign key(CID) references Customer(C\_ID), Pay\_Amount int, Pay\_Mode varchar(20), Pay\_Date date);**

Query OK, 0 rows affected (0.45 sec)

mysql> describe Payment;

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

| Field | Type | Null | Key | Default | Extra |

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

| Pay\_ID | int | NO | PRI | NULL | |

| CID | int | YES | MUL | NULL | |

| Pay\_Amount | int | YES | | NULL | |

| Pay\_Mode | varchar(20) | YES | | NULL | |

| Pay\_Date | date | YES | | NULL | |

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

5 rows in set (0.00 sec)

mysql> insert into Payment (Pay\_ID, CID, Pay\_Amount, Pay\_Mode, Pay\_Date) values(101, 1, 20000, "GPay", "2024-12-12"), (102, 2, 12000, "Paytm", "2024-12-22"), (103, 3, 4000, "Card", "2024-11-30"), (104, 4, 120000, "Cash", "2025-01-01"), (105, 5, 20000, "GPay", "2024-12-12"), (106, 6, 1200, "Paytm", "2023-12-22"), (108, 8, 1200, "Cash", "2025-01-22"), (109, 2, 2000, "Cash", "2024-08-24");

Query OK, 4 rows affected (0.01 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> select \* from Payment;

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

| Pay\_ID | CID | Pay\_Amount | Pay\_Mode | Pay\_Date |

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

| 101 | 1 | 20000 | GPay | 2024-12-12 |

| 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 103 | 3 | 4000 | Card | 2024-11-30 |

| 104 | 4 | 120000 | Cash | 2025-01-01 |

| 105 | 5 | 20000 | GPay | 2024-12-12 |

| 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 108 | 8 | 1200 | Cash | 2025-01-22 |

| 109 | 2 | 2000 | Cash | 2024-08-24 |

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

8 rows in set (0.00 sec)

**mysql> select C\_ID, Name, Mobile\_NO, City, Age from Customer inner join Payment on Customer.C\_ID= Payment.CID;**

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

| C\_ID | Name | Mobile\_NO | City | Age |

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

| 1 | Drashti | 982375893 | Surat | 21 |

| 2 | Sejal | 9909823452 | Vapi | 24 |

| 2 | Sejal | 9909823452 | Vapi | 24 |

| 3 | Anjana | 1147902374 | Navsari | 40 |

| 4 | Daizy | 9909232772 | Surat | 19 |

| 5 | Jay | 982375883 | Surat | 35 |

| 6 | Tina | 9909823562 | Kim | 22 |

| 8 | Raj | 8909232772 | Vapi | 20 |

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

8 rows in set (0.00 sec)

**mysql> select \* from Customer inner join Payment on Customer.C\_ID= Payment.CID;**

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

| C\_ID | Name | Mobile\_No | city | Age | Pay\_ID | CID | Pay\_Amount | Pay\_Mode | Pay\_Date |

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

| 1 | Drashti | 982375893 | Surat | 21 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 109 | 2 | 2000 | Cash | 2024-08-24 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 4 | Daizy | 9909232772 | Surat | 19 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 5 | Jay | 982375883 | Surat | 35 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 6 | Tina | 9909823562 | Kim | 22 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 8 | Raj | 8909232772 | Vapi | 20 | 108 | 8 | 1200 | Cash | 2025-01-22 |

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

8 rows in set (0.00 sec)

**mysql> select C\_ID, Name, Mobile\_NO, City, Age, Pay\_ID, Pay\_Mode, Pay\_Date from Customer inner join Payment on Customer.C\_ID= Payment.CID;**

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

| C\_ID | Name | Mobile\_NO | City | Age | Pay\_ID | Pay\_Mode | Pay\_Date |

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

| 1 | Drashti | 982375893 | Surat | 21 | 101 | GPay | 2024-12-12 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 102 | Paytm | 2024-12-22 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 109 | Cash | 2024-08-24 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 103 | Card | 2024-11-30 |

| 4 | Daizy | 9909232772 | Surat | 19 | 104 | Cash | 2025-01-01 |

| 5 | Jay | 982375883 | Surat | 35 | 105 | GPay | 2024-12-12 |

| 6 | Tina | 9909823562 | Kim | 22 | 106 | Paytm | 2023-12-22 |

| 8 | Raj | 8909232772 | Vapi | 20 | 108 | Cash | 2025-01-22 |

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

8 rows in set (0.00 sec)

**mysql> select \* from Customer left join Payment on Customer.C\_ID= Payment.CID;**

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

| C\_ID | Name | Mobile\_No | city | Age | Pay\_ID | CID | Pay\_Amount | Pay\_Mode | Pay\_Date |

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

| 1 | Drashti | 982375893 | Surat | 21 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 109 | 2 | 2000 | Cash | 2024-08-24 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 4 | Daizy | 9909232772 | Surat | 19 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 5 | Jay | 982375883 | Surat | 35 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 6 | Tina | 9909823562 | Kim | 22 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 7 | Priya | 1147902334 | Navsari | 30 | NULL | NULL | NULL | NULL | NULL |

| 8 | Raj | 8909232772 | Vapi | 20 | 108 | 8 | 1200 | Cash | 2025-01-22 |

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

9 rows in set (0.00 sec)

**mysql> select C\_ID, Name, Mobile\_NO, City, Pay\_Mode, Pay\_Date from Customer left join Payment on Customer.C\_ID= Payment.CID;**

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

| C\_ID | Name | Mobile\_NO | City | Pay\_Mode | Pay\_Date |

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

| 1 | Drashti | 982375893 | Surat | GPay | 2024-12-12 |

| 2 | Sejal | 9909823452 | Vapi | Paytm | 2024-12-22 |

| 2 | Sejal | 9909823452 | Vapi | Cash | 2024-08-24 |

| 3 | Anjana | 1147902374 | Navsari | Card | 2024-11-30 |

| 4 | Daizy | 9909232772 | Surat | Cash | 2025-01-01 |

| 5 | Jay | 982375883 | Surat | GPay | 2024-12-12 |

| 6 | Tina | 9909823562 | Kim | Paytm | 2023-12-22 |

| 7 | Priya | 1147902334 | Navsari | NULL | NULL |

| 8 | Raj | 8909232772 | Vapi | Cash | 2025-01-22 |

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

9 rows in set (0.00 sec)

**mysql> select \* from Customer right join Payment on Customer.C\_ID= Payment.CID;**

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

| C\_ID | Name | Mobile\_No | city | Age | Pay\_ID | CID | Pay\_Amount | Pay\_Mode | Pay\_Date |

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

| 1 | Drashti | 982375893 | Surat | 21 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 4 | Daizy | 9909232772 | Surat | 19 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 5 | Jay | 982375883 | Surat | 35 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 6 | Tina | 9909823562 | Kim | 22 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 8 | Raj | 8909232772 | Vapi | 20 | 108 | 8 | 1200 | Cash | 2025-01-22 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 109 | 2 | 2000 | Cash | 2024-08-24 |

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

8 rows in set (0.00 sec)

**mysql> select C\_ID, Name, Mobile\_NO, City, Age, Pay\_Mode, Pay\_Date from Customer right join Payment on Customer.C\_ID= Payment.CID;**

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

| C\_ID | Name | Mobile\_NO | City | Age | Pay\_Mode | Pay\_Date |

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

| 1 | Drashti | 982375893 | Surat | 21 | GPay | 2024-12-12 |

| 2 | Sejal | 9909823452 | Vapi | 24 | Paytm | 2024-12-22 |

| 3 | Anjana | 1147902374 | Navsari | 40 | Card | 2024-11-30 |

| 4 | Daizy | 9909232772 | Surat | 19 | Cash | 2025-01-01 |

| 5 | Jay | 982375883 | Surat | 35 | GPay | 2024-12-12 |

| 6 | Tina | 9909823562 | Kim | 22 | Paytm | 2023-12-22 |

| 8 | Raj | 8909232772 | Vapi | 20 | Cash | 2025-01-22 |

| 2 | Sejal | 9909823452 | Vapi | 24 | Cash | 2024-08-24 |

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

8 rows in set (0.00 sec)

**mysql> select C\_ID, Name, Mobile\_NO, City, Age, Pay\_Mode, Pay\_Date from Payment right join Customer on Customer.C\_ID= Payment.CID;**

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

| C\_ID | Name | Mobile\_NO | City | Age | Pay\_Mode | Pay\_Date |

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

| 1 | Drashti | 982375893 | Surat | 21 | GPay | 2024-12-12 |

| 2 | Sejal | 9909823452 | Vapi | 24 | Paytm | 2024-12-22 |

| 2 | Sejal | 9909823452 | Vapi | 24 | Cash | 2024-08-24 |

| 3 | Anjana | 1147902374 | Navsari | 40 | Card | 2024-11-30 |

| 4 | Daizy | 9909232772 | Surat | 19 | Cash | 2025-01-01 |

| 5 | Jay | 982375883 | Surat | 35 | GPay | 2024-12-12 |

| 6 | Tina | 9909823562 | Kim | 22 | Paytm | 2023-12-22 |

| 7 | Priya | 1147902334 | Navsari | 30 | NULL | NULL |

| 8 | Raj | 8909232772 | Vapi | 20 | Cash | 2025-01-22 |

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

9 rows in set (0.00 sec)

**mysql> select C.C\_ID, C.Name, P.Pay\_ID, P.Pay\_Amount, P.Pay\_Mode from Customer C, Payment P where C.C\_ID=P.CID;**

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

| C\_ID | Name | Pay\_ID | Pay\_Amount | Pay\_Mode |

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

| 1 | Drashti | 101 | 20000 | GPay |

| 2 | Sejal | 102 | 12000 | Paytm |

| 2 | Sejal | 109 | 2000 | Cash |

| 3 | Anjana | 103 | 4000 | Card |

| 4 | Daizy | 104 | 120000 | Cash |

| 5 | Jay | 105 | 20000 | GPay |

| 6 | Tina | 106 | 1200 | Paytm |

| 8 | Raj | 108 | 1200 | Cash |

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

8 rows in set (0.00 sec)

**mysql> select \* from Customer cross join Payment;**

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

| C\_ID | Name | Mobile\_No | city | Age | Pay\_ID | CID | Pay\_Amount | Pay\_Mode | Pay\_Date |

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

| 8 | Raj | 8909232772 | Vapi | 20 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 7 | Priya | 1147902334 | Navsari | 30 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 6 | Tina | 9909823562 | Kim | 22 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 5 | Jay | 982375883 | Surat | 35 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 4 | Daizy | 9909232772 | Surat | 19 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 1 | Drashti | 982375893 | Surat | 21 | 101 | 1 | 20000 | GPay | 2024-12-12 |

| 8 | Raj | 8909232772 | Vapi | 20 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 7 | Priya | 1147902334 | Navsari | 30 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 6 | Tina | 9909823562 | Kim | 22 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 5 | Jay | 982375883 | Surat | 35 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 4 | Daizy | 9909232772 | Surat | 19 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 1 | Drashti | 982375893 | Surat | 21 | 102 | 2 | 12000 | Paytm | 2024-12-22 |

| 8 | Raj | 8909232772 | Vapi | 20 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 7 | Priya | 1147902334 | Navsari | 30 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 6 | Tina | 9909823562 | Kim | 22 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 5 | Jay | 982375883 | Surat | 35 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 4 | Daizy | 9909232772 | Surat | 19 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 1 | Drashti | 982375893 | Surat | 21 | 103 | 3 | 4000 | Card | 2024-11-30 |

| 8 | Raj | 8909232772 | Vapi | 20 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 7 | Priya | 1147902334 | Navsari | 30 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 6 | Tina | 9909823562 | Kim | 22 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 5 | Jay | 982375883 | Surat | 35 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 4 | Daizy | 9909232772 | Surat | 19 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 1 | Drashti | 982375893 | Surat | 21 | 104 | 4 | 120000 | Cash | 2025-01-01 |

| 8 | Raj | 8909232772 | Vapi | 20 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 7 | Priya | 1147902334 | Navsari | 30 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 6 | Tina | 9909823562 | Kim | 22 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 5 | Jay | 982375883 | Surat | 35 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 4 | Daizy | 9909232772 | Surat | 19 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 1 | Drashti | 982375893 | Surat | 21 | 105 | 5 | 20000 | GPay | 2024-12-12 |

| 8 | Raj | 8909232772 | Vapi | 20 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 7 | Priya | 1147902334 | Navsari | 30 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 6 | Tina | 9909823562 | Kim | 22 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 5 | Jay | 982375883 | Surat | 35 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 4 | Daizy | 9909232772 | Surat | 19 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 1 | Drashti | 982375893 | Surat | 21 | 106 | 6 | 1200 | Paytm | 2023-12-22 |

| 8 | Raj | 8909232772 | Vapi | 20 | 108 | 8 | 1200 | Cash | 2025-01-22 |

| 7 | Priya | 1147902334 | Navsari | 30 | 108 | 8 | 1200 | Cash | 2025-01-22 |

| 6 | Tina | 9909823562 | Kim | 22 | 108 | 8 | 1200 | Cash | 2025-01-22 |

| 5 | Jay | 982375883 | Surat | 35 | 108 | 8 | 1200 | Cash | 2025-01-22 |

| 4 | Daizy | 9909232772 | Surat | 19 | 108 | 8 | 1200 | Cash | 2025-01-22 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 108 | 8 | 1200 | Cash | 2025-01-22 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 108 | 8 | 1200 | Cash | 2025-01-22 |

| 1 | Drashti | 982375893 | Surat | 21 | 108 | 8 | 1200 | Cash | 2025-01-22 |

| 8 | Raj | 8909232772 | Vapi | 20 | 109 | 2 | 2000 | Cash | 2024-08-24 |

| 7 | Priya | 1147902334 | Navsari | 30 | 109 | 2 | 2000 | Cash | 2024-08-24 |

| 6 | Tina | 9909823562 | Kim | 22 | 109 | 2 | 2000 | Cash | 2024-08-24 |

| 5 | Jay | 982375883 | Surat | 35 | 109 | 2 | 2000 | Cash | 2024-08-24 |

| 4 | Daizy | 9909232772 | Surat | 19 | 109 | 2 | 2000 | Cash | 2024-08-24 |

| 3 | Anjana | 1147902374 | Navsari | 40 | 109 | 2 | 2000 | Cash | 2024-08-24 |

| 2 | Sejal | 9909823452 | Vapi | 24 | 109 | 2 | 2000 | Cash | 2024-08-24 |

| 1 | Drashti | 982375893 | Surat | 21 | 109 | 2 | 2000 | Cash | 2024-08-24 |

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

64 rows in set (0.00 sec)

**mysql> select C\_ID, Name, Mobile\_NO, City, Age, Pay\_Mode, Pay\_Date from Customer left join Payment on Customer.C\_ID= Payment.CID union select C\_ID, Name, Mobile\_NO, City, Age, Pay\_Mode, Pay\_Date from Customer right join Payment on Customer.C\_ID= Payment.CID;**

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

| C\_ID | Name | Mobile\_NO | City | Age | Pay\_Mode | Pay\_Date |

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

| 1 | Drashti | 982375893 | Surat | 21 | GPay | 2024-12-12 |

| 2 | Sejal | 9909823452 | Vapi | 24 | Paytm | 2024-12-22 |

| 2 | Sejal | 9909823452 | Vapi | 24 | Cash | 2024-08-24 |

| 3 | Anjana | 1147902374 | Navsari | 40 | Card | 2024-11-30 |

| 4 | Daizy | 9909232772 | Surat | 19 | Cash | 2025-01-01 |

| 5 | Jay | 982375883 | Surat | 35 | GPay | 2024-12-12 |

| 6 | Tina | 9909823562 | Kim | 22 | Paytm | 2023-12-22 |

| 7 | Priya | 1147902334 | Navsari | 30 | NULL | NULL |

| 8 | Raj | 8909232772 | Vapi | 20 | Cash | 2025-01-22 |

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

9 rows in set (0.01 sec)