**SQL Queries.**

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

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

Your MySQL connection id is 12

Server version: 8.0.17 MySQL Community Server - GPL

Copyright (c) 2000, 2019, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its

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 |

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

| fees |

| information\_schema |

| mysql |

| performance\_schema |

| sys |

| week1 |

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

6 rows in set (0.02 sec)

mysql> use fees;

Database changed

mysql> show tables;

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

| Tables\_in\_fees |

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

| fees |

| student |

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

2 rows in set (0.01 sec)

mysql> desc student;

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

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

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

| Enroll\_No | int(10) | NO | PRI | NULL | |

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

| address | varchar(100) | NO | | NULL | |

| class | varchar(15) | YES | | NULL | |

| branch | varchar(20) | YES | | NULL | |

| gender | varchar(10) | YES | | NULL | |

| contact\_no | varchar(10) | YES | | NULL | |

| academic\_year | varchar(20) | YES | | NULL | |

| category | varchar(15) | YES | | NULL | |

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

9 rows in set (0.01 sec)

mysql> desc fees;;

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

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

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

| receipt\_no | int(10) | NO | PRI | NULL | |

| tution\_fees | int(10) | YES | | NULL | |

| date\_of\_payment | date | YES | | NULL | |

| other\_fees | int(7) | YES | | NULL | |

| mode\_of\_payment | varchar(10) | YES | | NULL | |

| development\_fees | int(7) | YES | | NULL | |

| Name | varchar(30) | NO | | NULL | |

| Enroll\_No | int(10) | YES | MUL | NULL | |

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

8 rows in set (0.00 sec)

ERROR:

No query specified

mysql> desc fees;

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

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

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

| receipt\_no | int(10) | NO | PRI | NULL | |

| tution\_fees | int(10) | YES | | NULL | |

| date\_of\_payment | date | YES | | NULL | |

| other\_fees | int(7) | YES | | NULL | |

| mode\_of\_payment | varchar(10) | YES | | NULL | |

| development\_fees | int(7) | YES | | NULL | |

| Name | varchar(30) | NO | | NULL | |

| Enroll\_No | int(10) | YES | MUL | NULL | |

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

8 rows in set (0.10 sec)

mysql> select \* from student;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category |

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

| 112445 | Grace Burgess | 10, Downing Street | Fourth Year | ECE | Female | 985644521 | 2016-17 | General |

| 112446 | Polly Gray | 13, Downing Street | Second Year | ECE | Female | 984412521 | 2018-19 | General |

| 234567 | Thomas Shelby | 12, Downing Street | First Year | CSE | Male | 987654321 | 2018-19 | General |

| 456123 | Arthur Shelby | 12, Downing Street | Second Year | CSE | Male | 985654321 | 2018-19 | General |

| 1134456 | Polly Gray | 14, Downing Street | Third Year | ECE | Female | 984562521 | 2018-19 | General |

| 1234567 | Debjit Chattopadhyay | baksara, palpara, Howrah | Third Year | CSE | male | 9064403885 | 2019-2020 | General |

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

6 rows in set (0.00 sec)

mysql> delete from student where Name = 'Debjit Chattopadhyay';

Query OK, 1 row affected (0.02 sec)

mysql> select \* from student;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category |

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

| 112445 | Grace Burgess | 10, Downing Street | Fourth Year | ECE | Female | 985644521 | 2016-17 | General |

| 112446 | Polly Gray | 13, Downing Street | Second Year | ECE | Female | 984412521 | 2018-19 | General |

| 234567 | Thomas Shelby | 12, Downing Street | First Year | CSE | Male | 987654321 | 2018-19 | General |

| 456123 | Arthur Shelby | 12, Downing Street | Second Year | CSE | Male | 985654321 | 2018-19 | General |

| 1134456 | Polly Gray | 14, Downing Street | Third Year | ECE | Female | 984562521 | 2018-19 | General |

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

5 rows in set (0.00 sec)

mysql> delete from student where Namee = 'Polly Gray' and class = 'Third Year';

ERROR 1054 (42S22): Unknown column 'Namee' in 'where clause'

mysql> delete from student where Name = 'Polly Gray' and class = 'Third Year';

Query OK, 1 row affected (0.01 sec)

mysql> delete from student where Name = 'Debjit Chattopadhyay';

Query OK, 0 rows affected (0.00 sec)

mysql> select \* from student;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category |

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

| 112445 | Grace Burgess | 10, Downing Street | Fourth Year | ECE | Female | 985644521 | 2016-17 | General |

| 112446 | Polly Gray | 13, Downing Street | Second Year | ECE | Female | 984412521 | 2018-19 | General |

| 234567 | Thomas Shelby | 12, Downing Street | First Year | CSE | Male | 987654321 | 2018-19 | General |

| 456123 | Arthur Shelby | 12, Downing Street | Second Year | CSE | Male | 985654321 | 2018-19 | General |

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

4 rows in set (0.00 sec)

mysql> insert into student values(112447, 'Lizzie Stark', '12, Downing Street', 'First Year', 'IT', 'Female', '5641327894', '2019-19', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(112448, 'John Shelby', 'Oxford Street', 'Second Year', 'IT', 'Male', '5641127894', '2019-18', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(112449, 'Finn Shelby', 'Oxford Street', 'Third Year', 'IT', 'Male', '5789127894', '2018-19', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> select \* from student;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category |

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

| 112445 | Grace Burgess | 10, Downing Street | Fourth Year | ECE | Female | 985644521 | 2016-17 | General |

| 112446 | Polly Gray | 13, Downing Street | Second Year | ECE | Female | 984412521 | 2018-19 | General |

| 112447 | Lizzie Stark | 12, Downing Street | First Year | IT | Female | 5641327894 | 2019-19 | General |

| 112448 | John Shelby | Oxford Street | Second Year | IT | Male | 5641127894 | 2019-18 | General |

| 112449 | Finn Shelby | Oxford Street | Third Year | IT | Male | 5789127894 | 2018-19 | General |

| 234567 | Thomas Shelby | 12, Downing Street | First Year | CSE | Male | 987654321 | 2018-19 | General |

| 456123 | Arthur Shelby | 12, Downing Street | Second Year | CSE | Male | 985654321 | 2018-19 | General |

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

7 rows in set (0.00 sec)

mysql> insert into student values(112450, 'Alfie Solomons', 'Oxford Street', 'Third Year', 'ECE', 'Male', '5789122394', '2018-19', 'General');

Query OK, 1 row affected (0.00 sec)

mysql> insert into student values(112451, 'Fredie Thorne', 'Oxford Street', 'Third Year', 'ECE', 'Male', '5784452394', '2018-19', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(112452, 'Chester Campbell', '11, Oxford Street', 'Third Year', 'ME', 'Male', '5784322394', '2018-19', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> select \* from student;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category |

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

| 112445 | Grace Burgess | 10, Downing Street | Fourth Year | ECE | Female | 985644521 | 2016-17 | General |

| 112446 | Polly Gray | 13, Downing Street | Second Year | ECE | Female | 984412521 | 2018-19 | General |

| 112447 | Lizzie Stark | 12, Downing Street | First Year | IT | Female | 5641327894 | 2019-19 | General |

| 112448 | John Shelby | Oxford Street | Second Year | IT | Male | 5641127894 | 2019-18 | General |

| 112449 | Finn Shelby | Oxford Street | Third Year | IT | Male | 5789127894 | 2018-19 | General |

| 112450 | Alfie Solomons | Oxford Street | Third Year | ECE | Male | 5789122394 | 2018-19 | General |

| 112451 | Fredie Thorne | Oxford Street | Third Year | ECE | Male | 5784452394 | 2018-19 | General |

| 112452 | Chester Campbell | 11, Oxford Street | Third Year | ME | Male | 5784322394 | 2018-19 | General |

| 234567 | Thomas Shelby | 12, Downing Street | First Year | CSE | Male | 987654321 | 2018-19 | General |

| 456123 | Arthur Shelby | 12, Downing Street | Second Year | CSE | Male | 985654321 | 2018-19 | General |

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

10 rows in set (0.00 sec)

mysql> select \* from fees;

Empty set (0.01 sec)

mysql> desc fees;

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

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

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

| receipt\_no | int(10) | NO | PRI | NULL | |

| tution\_fees | int(10) | YES | | NULL | |

| date\_of\_payment | date | YES | | NULL | |

| other\_fees | int(7) | YES | | NULL | |

| mode\_of\_payment | varchar(10) | YES | | NULL | |

| development\_fees | int(7) | YES | | NULL | |

| Name | varchar(30) | NO | | NULL | |

| Enroll\_No | int(10) | YES | MUL | NULL | |

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

8 rows in set (0.02 sec)

mysql> insert into fees values(112201, 60000, '2019-08-01', null, 'Cash', 1000, 'Fredie Thorne', 112451);

Query OK, 1 row affected (0.01 sec)

mysql> select \* from student join fees;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category | receipt\_no | tution\_fees | date\_of\_payment | other\_fees | mode\_of\_payment | development\_fees | Name | Enroll\_No |

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

| 112445 | Grace Burgess | 10, Downing Street | Fourth Year | ECE | Female | 985644521 | 2016-17 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112446 | Polly Gray | 13, Downing Street | Second Year | ECE | Female | 984412521 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112447 | Lizzie Stark | 12, Downing Street | First Year | IT | Female | 5641327894 | 2019-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112448 | John Shelby | Oxford Street | Second Year | IT | Male | 5641127894 | 2019-18 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112449 | Finn Shelby | Oxford Street | Third Year | IT | Male | 5789127894 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112450 | Alfie Solomons | Oxford Street | Third Year | ECE | Male | 5789122394 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112451 | Fredie Thorne | Oxford Street | Third Year | ECE | Male | 5784452394 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112452 | Chester Campbell | 11, Oxford Street | Third Year | ME | Male | 5784322394 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 234567 | Thomas Shelby | 12, Downing Street | First Year | CSE | Male | 987654321 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 456123 | Arthur Shelby | 12, Downing Street | Second Year | CSE | Male | 985654321 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

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

10 rows in set (0.00 sec)

mysql> select \* from student inner join fees;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category | receipt\_no | tution\_fees | date\_of\_payment | other\_fees | mode\_of\_payment | development\_fees | Name | Enroll\_No |

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

| 112445 | Grace Burgess | 10, Downing Street | Fourth Year | ECE | Female | 985644521 | 2016-17 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112446 | Polly Gray | 13, Downing Street | Second Year | ECE | Female | 984412521 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112447 | Lizzie Stark | 12, Downing Street | First Year | IT | Female | 5641327894 | 2019-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112448 | John Shelby | Oxford Street | Second Year | IT | Male | 5641127894 | 2019-18 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112449 | Finn Shelby | Oxford Street | Third Year | IT | Male | 5789127894 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112450 | Alfie Solomons | Oxford Street | Third Year | ECE | Male | 5789122394 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112451 | Fredie Thorne | Oxford Street | Third Year | ECE | Male | 5784452394 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112452 | Chester Campbell | 11, Oxford Street | Third Year | ME | Male | 5784322394 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 234567 | Thomas Shelby | 12, Downing Street | First Year | CSE | Male | 987654321 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 456123 | Arthur Shelby | 12, Downing Street | Second Year | CSE | Male | 985654321 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

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

10 rows in set (0.00 sec)

mysql> select \* from student, fees where student.Enroll\_No = fees.Enroll\_No;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category | receipt\_no | tution\_fees | date\_of\_payment | other\_fees | mode\_of\_payment | development\_fees | Name | Enroll\_No |

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

| 112451 | Fredie Thorne | Oxford Street | Third Year | ECE | Male | 5784452394 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

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

1 row in set (0.00 sec)

mysql> select \* from student natural join fees;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category | receipt\_no | tution\_fees | date\_of\_payment | other\_fees | mode\_of\_payment | development\_fees |

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

| 112451 | Fredie Thorne | Oxford Street | Third Year | ECE | Male | 5784452394 | 2018-19 | General | 112201 | 60000 | 2019-08-01 | NULL | Cash | 1000 |

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

1 row in set (0.00 sec)

mysql> select \* from student;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category |

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

| 112445 | Grace Burgess | 10, Downing Street | Fourth Year | ECE | Female | 985644521 | 2016-17 | General |

| 112446 | Polly Gray | 13, Downing Street | Second Year | ECE | Female | 984412521 | 2018-19 | General |

| 112447 | Lizzie Stark | 12, Downing Street | First Year | IT | Female | 5641327894 | 2019-19 | General |

| 112448 | John Shelby | Oxford Street | Second Year | IT | Male | 5641127894 | 2019-18 | General |

| 112449 | Finn Shelby | Oxford Street | Third Year | IT | Male | 5789127894 | 2018-19 | General |

| 112450 | Alfie Solomons | Oxford Street | Third Year | ECE | Male | 5789122394 | 2018-19 | General |

| 112451 | Fredie Thorne | Oxford Street | Third Year | ECE | Male | 5784452394 | 2018-19 | General |

| 112452 | Chester Campbell | 11, Oxford Street | Third Year | ME | Male | 5784322394 | 2018-19 | General |

| 234567 | Thomas Shelby | 12, Downing Street | First Year | CSE | Male | 987654321 | 2018-19 | General |

| 456123 | Arthur Shelby | 12, Downing Street | Second Year | CSE | Male | 985654321 | 2018-19 | General |

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

10 rows in set (0.00 sec)

mysql> alter table fees add column dues int(10) after tution\_fees;

Query OK, 0 rows affected, 1 warning (0.45 sec)

Records: 0 Duplicates: 0 Warnings: 1

mysql> desc fees;

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

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

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

| receipt\_no | int(10) | NO | PRI | NULL | |

| tution\_fees | int(10) | YES | | NULL | |

| dues | int(10) | YES | | NULL | |

| date\_of\_payment | date | YES | | NULL | |

| other\_fees | int(7) | YES | | NULL | |

| mode\_of\_payment | varchar(10) | YES | | NULL | |

| development\_fees | int(7) | YES | | NULL | |

| Name | varchar(30) | NO | | NULL | |

| Enroll\_No | int(10) | YES | MUL | NULL | |

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

9 rows in set (0.00 sec)

mysql> alter table fees rename column tution\_fees to tution\_fees\_paid int(10);

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 'int(10)' at line 1

mysql> alter table fees rename column tution\_fees tution\_fees\_paid int(10);

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 'tution\_fees\_paid int(10)' at line 1

mysql> alter table fees change tution\_fees tution\_fees\_paid int(10);

Query OK, 0 rows affected, 1 warning (0.14 sec)

Records: 0 Duplicates: 0 Warnings: 1

mysql> desc fees;

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

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

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

| receipt\_no | int(10) | NO | PRI | NULL | |

| tution\_fees\_paid | int(10) | YES | | NULL | |

| dues | int(10) | YES | | NULL | |

| date\_of\_payment | date | YES | | NULL | |

| other\_fees | int(7) | YES | | NULL | |

| mode\_of\_payment | varchar(10) | YES | | NULL | |

| development\_fees | int(7) | YES | | NULL | |

| Name | varchar(30) | NO | | NULL | |

| Enroll\_No | int(10) | YES | MUL | NULL | |

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

9 rows in set (0.00 sec)

mysql> select \* from fees;

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

| receipt\_no | tution\_fees\_paid | dues | date\_of\_payment | other\_fees | mode\_of\_payment | development\_fees | Name | Enroll\_No |

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

| 112201 | 60000 | NULL | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

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

1 row in set (0.00 sec)

mysql> insert into fees values(112202, 40000, 20000, '2019-08-01',null,'Demand Draft', 1000, 'Chester Campbell', 112452);

ERROR 1406 (22001): Data too long for column 'mode\_of\_payment' at row 1

mysql> insert into fees values(112202, 40000, 20000, '2019-08-01',null,'Draft', 1000, 'Chester Campbell', 112452);

Query OK, 1 row affected (0.01 sec)

mysql> insert into fees values(112203, 50000, 10000, '2019-08-02',500,'Cash', 1000, 'Alfie Solomons', 112450);

Query OK, 1 row affected (0.01 sec)

mysql> insert into fees values(112204, 60000, null, '2019-08-02',null,'Cash', 1000, 'Thomas Shelby', 234567);

Query OK, 1 row affected (0.01 sec)

mysql> insert into fees values(112205, 60000, null, '2019-08-03',null,'Cheque', 1000, 'Arthur Shelby', 456123);

Query OK, 1 row affected (0.01 sec)

mysql> insert into fees values(112206, 30000, 30000, '2019-08-03',null,'Cheque', 1000, 'Arthur Shelby', 456123);

Query OK, 1 row affected (0.01 sec)

mysql> delete from fees where receipt\_no = 112206;

Query OK, 1 row affected (0.05 sec)

mysql> insert into fees values(112206, 30000, 30000, '2019-08-03',null,'Cheque', 1000, 'John Shelby', 112448);

Query OK, 1 row affected (0.01 sec)

mysql> select \* from fees;

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

| receipt\_no | tution\_fees\_paid | dues | date\_of\_payment | other\_fees | mode\_of\_payment | development\_fees | Name | Enroll\_No |

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

| 112201 | 60000 | NULL | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112202 | 40000 | 20000 | 2019-08-01 | NULL | Draft | 1000 | Chester Campbell | 112452 |

| 112203 | 50000 | 10000 | 2019-08-02 | 500 | Cash | 1000 | Alfie Solomons | 112450 |

| 112204 | 60000 | NULL | 2019-08-02 | NULL | Cash | 1000 | Thomas Shelby | 234567 |

| 112205 | 60000 | NULL | 2019-08-03 | NULL | Cheque | 1000 | Arthur Shelby | 456123 |

| 112206 | 30000 | 30000 | 2019-08-03 | NULL | Cheque | 1000 | John Shelby | 112448 |

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

6 rows in set (0.00 sec)

mysql> insert into fees values(112207, 20000, 40000, '2019-08-05',null,'Cheque', 1000, 'Finn Shelby', 112449);

Query OK, 1 row affected (0.01 sec)

mysql> insert into fees values(112208, 59000, 1000, '2019-08-05',null,'Cash', 1000, 'Polly Gray', 112449);

Query OK, 1 row affected (0.01 sec)

mysql> insert into fees values(112209,60000,null, '2019-08-05',null,'Cash', 1000, 'Grace Burgess', 112445);

Query OK, 1 row affected (0.01 sec)

mysql> insert into fees values(112210,60000,null, '2019-08-10',null,'Cash', 1000, 'Lizzie Stark', 112447);

Query OK, 1 row affected (0.01 sec)

mysql> select \* from fees;

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

| receipt\_no | tution\_fees\_paid | dues | date\_of\_payment | other\_fees | mode\_of\_payment | development\_fees | Name | Enroll\_No |

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

| 112201 | 60000 | NULL | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112202 | 40000 | 20000 | 2019-08-01 | NULL | Draft | 1000 | Chester Campbell | 112452 |

| 112203 | 50000 | 10000 | 2019-08-02 | 500 | Cash | 1000 | Alfie Solomons | 112450 |

| 112204 | 60000 | NULL | 2019-08-02 | NULL | Cash | 1000 | Thomas Shelby | 234567 |

| 112205 | 60000 | NULL | 2019-08-03 | NULL | Cheque | 1000 | Arthur Shelby | 456123 |

| 112206 | 30000 | 30000 | 2019-08-03 | NULL | Cheque | 1000 | John Shelby | 112448 |

| 112207 | 20000 | 40000 | 2019-08-05 | NULL | Cheque | 1000 | Finn Shelby | 112449 |

| 112208 | 59000 | 1000 | 2019-08-05 | NULL | Cash | 1000 | Polly Gray | 112449 |

| 112209 | 60000 | NULL | 2019-08-05 | NULL | Cash | 1000 | Grace Burgess | 112445 |

| 112210 | 60000 | NULL | 2019-08-10 | NULL | Cash | 1000 | Lizzie Stark | 112447 |

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

10 rows in set (0.00 sec)

**Show Tables.**

mysql> show databases;

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

| Database |

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

| fees |

| information\_schema |

| mysql |

| performance\_schema |

| sys |

| week1 |

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

6 rows in set (0.02 sec)

mysql> use fees;

Database changed

mysql> show tables;

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

| Tables\_in\_fees |

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

| fees |

| student |

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

2 rows in set (0.01 sec)

mysql> select \* from fees;

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

| receipt\_no | tution\_fees\_paid | dues | date\_of\_payment | other\_fees | mode\_of\_payment | development\_fees | Name | Enroll\_No |

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

| 112201 | 60000 | NULL | 2019-08-01 | NULL | Cash | 1000 | Fredie Thorne | 112451 |

| 112202 | 40000 | 20000 | 2019-08-01 | NULL | Draft | 1000 | Chester Campbell | 112452 |

| 112203 | 50000 | 10000 | 2019-08-02 | 500 | Cash | NULL | Alfie Solomons | 112450 |

| 112204 | 60000 | NULL | 2019-08-02 | NULL | Cash | 1000 | Thomas Shelby | 234567 |

| 112205 | 60000 | NULL | 2019-08-03 | NULL | Cheque | 1000 | Arthur Shelby | 456123 |

| 112206 | 30000 | 30000 | 2019-08-03 | NULL | Cheque | NULL | John Shelby | 112448 |

| 112207 | 20000 | 40000 | 2019-08-05 | NULL | Cheque | NULL | Finn Shelby | 112449 |

| 112208 | 59000 | 1000 | 2019-08-05 | NULL | Cash | 1000 | Polly Gray | 112446 |

| 112209 | 60000 | NULL | 2019-08-05 | NULL | Cash | 1000 | Grace Burgess | 112445 |

| 112210 | 60000 | NULL | 2019-08-10 | NULL | Cash | NULL | Lizzie Stark | 112447 |

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

10 rows in set (0.00 sec)

mysql> select \* from student;

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

| Enroll\_No | Name | address | class | branch | gender | contact\_no | academic\_year | category |

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

| 112445 | Grace Burgess | 10, Downing Street | Fourth Year | ECE | Female | 985644521 | 2016-17 | OBC |

| 112446 | Polly Gray | 13, Downing Street | Second Year | ECE | Female | 984412521 | 2018-19 | General |

| 112447 | Lizzie Stark | 12, Downing Street | First Year | IT | Female | 5641327894 | 2019-19 | General |

| 112448 | John Shelby | Oxford Street | Second Year | IT | Male | 5641127894 | 2019-18 | General |

| 112449 | Finn Shelby | Oxford Street | Third Year | IT | Male | 5789127894 | 2018-19 | General |

| 112450 | Alfie Solomons | Oxford Street | Third Year | ECE | Male | 5789122394 | 2018-19 | OBC |

| 112451 | Fredie Thorne | Oxford Street | Third Year | ECE | Male | 5784452394 | 2018-19 | General |

| 112452 | Chester Campbell | 11, Oxford Street | Third Year | ME | Male | 5784322394 | 2018-19 | SC |

| 234567 | Thomas Shelby | 12, Downing Street | First Year | CSE | Male | 987654321 | 2018-19 | General |

| 456123 | Arthur Shelby | 12, Downing Street | Second Year | CSE | Male | 985654321 | 2018-19 | General |

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

10 rows in set (0.00 sec)

**2. Describe the Tables.**

mysql> desc student;

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

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

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

| Enroll\_No | int(10) | NO | PRI | NULL | |

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

| address | varchar(100) | NO | | NULL | |

| class | varchar(15) | YES | | NULL | |

| branch | varchar(20) | YES | | NULL | |

| gender | varchar(10) | YES | | NULL | |

| contact\_no | varchar(10) | YES | | NULL | |

| academic\_year | varchar(20) | YES | | NULL | |

| category | varchar(15) | YES | | NULL | |

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

9 rows in set (0.01 sec)

mysql> desc fees;;

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

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

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

| receipt\_no | int(10) | NO | PRI | NULL | |

| tution\_fees | int(10) | YES | | NULL | |

| date\_of\_payment | date | YES | | NULL | |

| other\_fees | int(7) | YES | | NULL | |

| mode\_of\_payment | varchar(10) | YES | | NULL | |

| development\_fees | int(7) | YES | | NULL | |

| Name | varchar(30) | NO | | NULL | |

| Enroll\_No | int(10) | YES | MUL | NULL | |

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

8 rows in set (0.00 sec)

**3. Insert data into table.**

Student:-

mysql> insert into student values(112447, 'Lizzie Stark', '12, Downing Street', 'First Year', 'IT', 'Female', '5641327894', '2019-19', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(112448, 'John Shelby', 'Oxford Street', 'Second Year', 'IT', 'Male', '5641127894', '2019-18', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(112449, 'Finn Shelby', 'Oxford Street', 'Third Year', 'IT', 'Male', '5789127894', '2018-19', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(112450, 'Alfie Solomons', 'Oxford Street', 'Third Year', 'ECE', 'Male', '5789122394', '2018-19', 'General');

Query OK, 1 row affected (0.00 sec)

mysql> insert into student values(112451, 'Fredie Thorne', 'Oxford Street', 'Third Year', 'ECE', 'Male', '5784452394', '2018-19', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(112452, 'Chester Campbell', '11, Oxford Street', 'Third Year', 'ME', 'Male', '5784322394', '2018-19', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(112445, 'Grace Burgess', '10, Downing Street', 'Fourth Year', '’ECE, 'Female', ' 985644521', 2016-17 ', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(112446, 'Polly Gray', '13, Downing Street', 'Second Year', '’ECE, 'Female', ' 984412521 ', 2018-19', 'General');

Query OK, 1 row affected (0.01 sec)

mysql> insert into student values(234567, 'Thomas Shelby, '12, Downing Street', 'First Year', '’CSE, 'Male', ' 987654321 ', 2018-19', 'General');

Query OK, 1 row affected (0.01 sec)

**4. Delete data from table**

mysql> delete from student where Name = 'Polly Gray' and class = 'Third Year';

Query OK, 1 row affected (0.01 sec)

**5. Select all general category students who have paid by cash.**

mysql> select Name from student natural join fees where mode\_of\_payment = 'Cash' and category = 'General';

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

| Name |

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

| Polly Gray |

| Lizzie Stark |

| Fredie Thorne |

| Thomas Shelby |

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

4 rows in set (0.00 sec)

**6. Select names of students who have paid development fees.**

mysql> select Name from student natural join fees where development\_fees <> 'null';

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

| Name |

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

| Fredie Thorne |

| Chester Campbell |

| Thomas Shelby |

| Arthur Shelby |

| Polly Gray |

| Grace Burgess |

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

6 rows in set, 1 warning (0.02 sec)

**7. Select students enrolment number from CSE branch who have not paid tution fees.**

mysql> select Enroll\_No,Name from student natural join fees where dues <> 'null';

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

| Enroll\_No | Name |

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

| 112452 | Chester Campbell |

| 112450 | Alfie Solomons |

| 112448 | John Shelby |

| 112449 | Finn Shelby |

| 112446 | Polly Gray |

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

5 rows in set, 1 warning (0.00 sec)

**8. Select students from different branches who have paid tution fees using the group by clause.**

mysql> select name from student natural join fees where tution\_fees\_paid > 10000 group by branch;

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

| name |

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

| Fredie Thorne |

| Chester Campbell |

| Thomas Shelby |

| John Shelby |

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

4 rows in set (0.00 sec)

**9. Display the contact number of students who a have paid the development fees after 10th July.**

mysql> select contact\_no from student natural join fees where date\_of\_payment > '2019-07-10';

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

| contact\_no |

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

| 5789122394 |

| 985654321 |

| 5641127894 |

| 984412521 |

| 985644521 |

| 5641327894 |

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

6 rows in set (0.01 sec)

**10. Select all students for the academic year 2017 who paid via offline mode.**

mysql> select Name from student natural join fees where academic\_year = '2018-19' and mode\_of\_payment = 'Cash';

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

| Name |

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

| Polly Gray |

| Alfie Solomons |

| Fredie Thorne |

| Thomas Shelby |

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

4 rows in set (0.00 sec)

**11. Select address of OBC students who paid on the 15th of July.**

mysql> select address from student natural join fees where date\_of\_payment = '2019-07-15' and category = 'OBC';

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

| address |

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

| 12, Downing Street |

| Oxford Street |

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

2 rows in set (0.00 sec)

**12. Select all student names whose names begin with T or F and who have paid via online mode.**

mysql> select Name from fees natural join student where name like 'T%' or name like 'F%' and mode\_of\_payment <> 'Cash';

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

| Name |

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

| Thomas Shelby |

| Finn Shelby |

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

2 rows in set (0.00 sec)

**13. Select all phone numbers beginning with 578 who have paid development fees on the 2nd of July.**

mysql> select contact\_no from fees natural join student where contact\_no like '578%' and date\_of\_payment = '2019-07-02';

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

| contact\_no |

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

| 5784322394 |

| 5789127894 |

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

2 rows in set (0.00 sec)

**14. Select all enrolment numbers ending with 122 who have not yet paid tution fees.**

mysql> select Enroll\_No from student natural join fees where Enroll\_No like '%5\_' and tution\_fees\_paid < 60000;

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

| Enroll\_No |

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

| 112450 |

| 112452 |

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

2 rows in set (0.00 sec)

**15. Select all receipt numbers not from ECE branch who paid fees within 15th July.**

mysql> select receipt\_no from fees natural join student where branch <> 'ECE' and date\_of\_payment < '2019-07-15';

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

| receipt\_no |

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

| 112202 |

| 112204 |

| 112207 |

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

3 rows in set (0.00 sec)

**16. Sort all receipt numbers from CSE departments in descending order.**

mysql> select receipt\_no from fees natural join student where branch = 'CSE' order by receipt\_no DESC;

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

| receipt\_no |

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

| 112205 |

| 112204 |

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

2 rows in set (0.00 sec)