

# 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

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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 Nameee = 'Polly Gray' and class =
'Third Year';
```

```
ERROR 1054 (42S22): Unknown column 'Nameee' 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, 'Freddie 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
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 | Freddie Thorne | 112451 |
| 112448 | John Shelby | Oxford Street | Second Year | IT |
Male | 5641127894 | 2019-18 | General | 112201 | 60000 |
2019-08-01 | NULL | Cash | 1000 | Freddie Thorne | 112451 |
| 112449 | Finn Shelby | Oxford Street | Third Year | IT |
Male | 5789127894 | 2018-19 | General | 112201 | 60000 |
2019-08-01 | NULL | Cash | 1000 | Freddie Thorne | 112451 |
| 112450 | Alfie Solomons | Oxford Street | Third Year | ECE |
Male | 5789122394 | 2018-19 | General | 112201 | 60000 |
2019-08-01 | NULL | Cash | 1000 | Freddie Thorne | 112451 |
| 112451 | Freddie Thorne | Oxford Street | Third Year | ECE |
Male | 5784452394 | 2018-19 | General | 112201 | 60000 |
2019-08-01 | NULL | Cash | 1000 | Freddie Thorne | 112451 |
| 112452 | Chester Campbell | 11, Oxford Street | Third Year | ME |
Male | 5784322394 | 2018-19 | General | 112201 | 60000 |
2019-08-01 | NULL | Cash | 1000 | Freddie Thorne | 112451 |
| 234567 | Thomas Shelby | 12, Downing Street | First Year | CSE |
Male | 987654321 | 2018-19 | General | 112201 | 60000 |
2019-08-01 | NULL | Cash | 1000 | Freddie Thorne | 112451 |
| 456123 | Arthur Shelby | 12, Downing Street | Second Year |
CSE | Male | 985654321 | 2018-19 | General | 112201 |
60000 | 2019-08-01 | NULL | Cash | 1000 |
Freddie 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 | tuition_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 | Freddie
Thorne | 112451 |
| 112446 | Polly Gray | 13, Downing Street | Second Year | ECE
| Female | 984412521 | 2018-19 | General | 112201 | 60000
| 2019-08-01 | NULL | Cash | 1000 | Freddie
Thorne | 112451 |
| 112447 | Lizzie Stark | 12, Downing Street | First Year | IT |
| Female | 5641327894 | 2019-19 | General | 112201 | 60000 |
| 2019-08-01 | NULL | Cash | 1000 | Freddie
Thorne | 112451 |
| 112448 | John Shelby | Oxford Street | Second Year | IT |
| Male | 5641127894 | 2019-18 | General | 112201 | 60000 |
| 2019-08-01 | NULL | Cash | 1000 | Freddie
Thorne | 112451 |
| 112449 | Finn Shelby | Oxford Street | Third Year | IT |
| Male | 5789127894 | 2018-19 | General | 112201 | 60000 |
| 2019-08-01 | NULL | Cash | 1000 | Freddie
Thorne | 112451 |
| 112450 | Alfie Solomons | Oxford Street | Third Year | ECE
| Male | 5789122394 | 2018-19 | General | 112201 | 60000 |
| 2019-08-01 | NULL | Cash | 1000 | Freddie
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
112452	Chester Campbell	11, Oxford Street	Third Year	ME	Male	5784322394	2018-19	General	112201	60000	2019-08-01	NULL	Cash	1000	Fredie Thorne
234567	Thomas Shelby	12, Downing Street	First Year	CSE	Male	987654321	2018-19	General	112201	60000	2019-08-01	NULL	Cash	1000	Fredie Thorne
456123	Arthur Shelby	12, Downing Street	Second Year	CSE	Male	985654321	2018-19	General	112201	60000	2019-08-01	NULL	Cash	1000	Fredie Thorne

```

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

```

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
112451	Fredie Thorne	Oxford Street	Third Year	ECE	Male	5784452394	2018-19	General	112201	60000	2019-			

```
08-01 | NULL | Cash | 1000 | Freddie 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 | tuition_fees |
| date_of_payment | other_fees | mode_of_payment | development_fees |
|
+-----+-----+-----+-----+-----+-----+
-----+-----+-----+-----+-----+-----+
+-----+-----+-----+
| 112451 | Freddie 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 | tuition_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 | Freddie 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 |    |
| tuition_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, 'Freddie 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 |
| Freddie 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          |
+-----+
| Freddie 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 tuition 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 tuition fees using the group by clause.**

```
mysql> select name from student natural join fees where  
tuition_fees_paid > 10000 group by branch;
```

```
+-----+  
| name      |  
+-----+  
| Freddie Thorne |  
| Chester Campbell |  
| Thomas Shelby   |  
| John Shelby     |  
+-----+
```

4 rows in set (0.00 sec)

**9. Display the contact number of students who have paid the development fees after 10<sup>th</sup> 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 15<sup>th</sup> 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 tuition fees.**

```
mysql> select Enroll_No from student natural join fees where  
Enroll_No like '%5_' and tuition_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 15<sup>th</sup> 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)
```