

# SQL PRACTICAL FILE

1)Create Database Named Class11

```
mysql> create database class11;  
Query OK, 1 row affected (0.00 sec)
```

2)Open Database Class 11

```
mysql> use class11;  
Database changed
```

3) Create a student table with the student id, class, section, gender, name, dob, and marks as attributes where the student id is the primary key

```
mysql> create table student (studentid int(4) primary key, class char(2),  
-> section char(1),  
-> gender char(1),  
-> name varchar(20),  
-> dob date,  
-> marks decimal(5,2));  
Query OK, 0 rows affected, 1 warning (0.01 sec)
```

## 4)View the structure of the table

```
mysql> desc student;
```

Field	Type	Null	Key	Default	Extra
studentid	int	NO	PRI	NULL	
class	char(2)	YES		NULL	
section	char(1)	YES		NULL	
gender	char(1)	YES		NULL	
name	varchar(20)	YES		NULL	
dob	date	YES		NULL	
marks	decimal(5,2)	YES		NULL	

```
7 rows in set (0.01 sec)
```

## 5)Insert the details of at least 10 students in the above table

```
mysql> insert into student values
-> (1101, 'XI', 'A', 'M', 'Aksh', '2005/12/23', 88.21),
-> (1102, 'XI', 'B', 'F', 'Moksha', '2005/03/24', 77.90),
-> (1103, 'XI', 'A', 'F', 'Archi', '2006/04/21', 76.20),
-> (1104, 'XI', 'B', 'M', 'Bhavin', '2005/09/15', 68.23),
-> (1105, 'XI', 'C', 'M', 'Kevin', '2005/08/23', 66.33),
-> (1106, 'XI', 'C', 'F', 'Naadiya', '2005/10/27', 62.33),
-> (1107, 'XI', 'D', 'M', 'Krish', '2005/01/23', 84.33),
-> (1108, 'XI', 'D', 'M', 'Ayush', '2005/04/23', 55.33),
-> (1109, 'XI', 'C', 'F', 'Shruti', '2005/06/01', 74.33),
-> (1110, 'XI', 'D', 'F', 'Shivi', '2005/10/19', 72.30);
```

## 6) Display the details of the student table

```
mysql> select * from student;
```

studentid	class	section	gender	name	dob	marks
1101	XI	A	M	Aksh	2005-12-23	88.21
1102	XI	B	F	Moksha	2005-03-24	77.90
1103	XI	A	F	Archi	2006-04-21	76.20
1104	XI	B	M	Bhavin	2005-09-15	68.23
1105	XI	C	M	Kevin	2005-08-23	66.33
1106	XI	C	F	Naadiya	2005-10-27	62.33
1107	XI	D	M	Krish	2005-01-23	84.33
1108	XI	D	M	Ayush	2005-04-23	55.33
1109	XI	C	F	Shruti	2005-06-01	74.33
1110	XI	D	F	Shivi	2005-10-19	72.30

10 rows in set (0.00 sec)

## 7) Delete record of students who secured less than 65 marks

```
mysql> delete from student where marks <65;
Query OK, 2 rows affected (0.00 sec)
```

```
mysql> select * from student;
```

studentid	class	section	gender	name	dob	marks
1101	XI	A	M	Aksh	2005-12-23	88.21
1102	XI	B	F	Moksha	2005-03-24	77.90
1103	XI	A	F	Archi	2006-04-21	76.20
1104	XI	B	M	Bhavin	2005-09-15	68.23
1105	XI	C	M	Kevin	2005-08-23	66.33
1107	XI	D	M	Krish	2005-01-23	84.33
1109	XI	C	F	Shruti	2005-06-01	74.33
1110	XI	D	F	Shivi	2005-10-19	72.30

8) Increase marks by 5% for who have student id more than 1105

```
[mysql> select * from student;
```

studentid	class	section	gender	name	dob	marks
1101	XI	A	M	Aksh	2005-12-23	88.21
1102	XI	B	F	Moksha	2005-03-24	77.90
1103	XI	A	F	Archi	2006-04-21	76.20
1104	XI	B	M	Bhavin	2005-09-15	68.23
1105	XI	C	M	Kevin	2005-08-23	66.33
1107	XI	D	M	Krish	2005-01-23	88.55
1109	XI	C	F	Shruti	2005-06-01	78.05
1110	XI	D	F	Shivi	2005-10-19	75.92

```
8 rows in set (0.00 sec)
```

9) Display the content of the table of female students

```
[mysql> select * from student where gender = 'f';
```

studentid	class	section	gender	name	dob	marks
1102	XI	B	F	Moksha	2005-03-24	77.90
1103	XI	A	F	Archi	2006-04-21	76.20
1109	XI	C	F	Shruti	2005-06-01	78.05
1110	XI	D	F	Shivi	2005-10-19	75.92

```
4 rows in set (0.00 sec)
```



10) Display studentid, Name and Marks whose marks are more than 50

```
[mysql> select studentid,name,marks from student where marks>50;
+-----+-----+-----+
| studentid | name   | marks |
+-----+-----+-----+
| 1101      | Aksh   | 88.21 |
| 1102      | Moksha | 77.90 |
| 1103      | Archi  | 76.20 |
| 1104      | Bhavin | 68.23 |
| 1105      | Kevin  | 66.33 |
| 1107      | Krish  | 88.55 |
| 1109      | Shruti | 78.05 |
| 1110      | Shivi  | 75.92 |
+-----+-----+-----+
8 rows in set (0.00 sec)
```

11) Find the average of marks from the student table

```
[mysql> select avg(marks) from student;
+-----+
| avg(marks) |
+-----+
| 77.423750  |
+-----+
1 row in set (0.01 sec)
```

12) Find the number of students, who are from section 'A'

```
[mysql> select count(section) from student where section='A';  
+-----+  
| count(section) |  
+-----+  
|                2 |  
+-----+  
1 row in set (0.00 sec)
```

13) Add a new column email in the above table

```
[mysql> alter table student add column email varchar(20);  
Query OK, 0 rows affected (0.04 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

14) Add the email ids of each student in the created email column

```
[mysql> update student set email='a@a.com';  
Query OK, 8 rows affected (0.00 sec)  
Rows matched: 8 Changed: 8 Warnings: 0
```

15) Display the information of all the students, name contains 'sh'

```
[mysql> select * from student where name like '%sh%' ;
```

studentid	class	section	gender	name	dob	marks	email
1101	XI	A	M	Aksh	2005-12-23	88.21	a@a.com
1102	XI	B	F	Moksha	2005-03-24	77.90	a@a.com
1107	XI	D	M	Krish	2005-01-23	88.55	a@a.com
1109	XI	C	F	Shruti	2005-06-01	78.05	a@a.com
1110	XI	D	F	Shivi	2005-10-19	75.92	a@a.com

```
5 rows in set (0.00 sec)
```

16) Display the information of all the students, name starts with 'sh'

```
mysql> select * from student where name like 'Sh%';
```

studentid	class	section	gender	name	dob	marks	email
1109	XI	C	F	Shruti	2005-06-01	78.05	a@a.com
1110	XI	D	F	Shivi	2005-10-19	75.92	a@a.com

```
2 rows in set (0.00 sec)
```



17) Display studentid, Name, DOB of who are born in 2005

```
mysql> select studentid, name, dob from student where dob between '2005-01-01' and '2005-12-31';
```

studentid	name	dob
1101	Aksh	2005-12-23
1102	Moksha	2005-03-24
1104	Bhavin	2005-09-15
1105	Kevin	2005-08-23
1107	Krish	2005-01-23
1109	Shruti	2005-06-01
1110	Shivi	2005-10-19

7 rows in set, 8 warnings (0.01 sec)

18) Display studentid, Name, DOB, Marks, Email of male students in ascending order of their names

```
mysql> select studentid, name, dob from student order by name;
```

studentid	name	dob
1101	Aksh	2005-12-23
1103	Archi	2006-04-21
1104	Bhavin	2005-09-15
1105	Kevin	2005-08-23
1107	Krish	2005-01-23
1102	Moksha	2005-03-24
1110	Shivi	2005-10-19
1109	Shruti	2005-06-01

8 rows in set (0.00 sec)

19) Display studentid, Gender, Name, DOB, Marks, Email in descending order of their marks

```
mysql> select studentid, gender, name, dob, marks, email from student order
-> by marks desc;
```

studentid	gender	name	dob	marks	email
1107	M	Krish	2005-01-23	88.55	a@a.com
1101	M	Aksh	2005-12-23	88.21	a@a.com
1109	F	Shruti	2005-06-01	78.05	a@a.com
1102	F	Moksha	2005-03-24	77.90	a@a.com
1103	F	Archi	2006-04-21	76.20	a@a.com
1110	F	Shivi	2005-10-19	75.92	a@a.com
1104	M	Bhavin	2005-09-15	68.23	a@a.com
1105	M	Kevin	2005-08-23	66.33	a@a.com

8 rows in set (0.01 sec)

20) Display the unique section available in the table

```
mysql> select distinct section from student;
```

section
A
B
C
D

4 rows in set (0.00 sec)