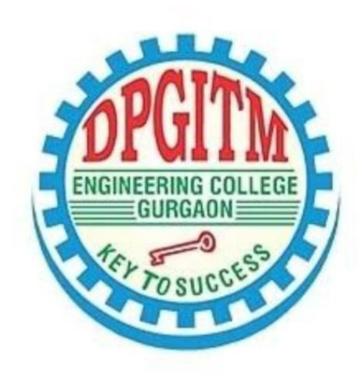# DPG INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Database Management System Project

SCHOOL MANAGEMENT SYSTEM

<u>INDEX</u>

- About the project
- Tools Used
- ER-Diagram
- School Management System Details
- Queries to create School Management System
- Database Operations

ABOUT THE PROJECT

The School Management System is a database-based project done with help of Mysql. This project is very useful for the Schools to keep all the records of School. This project is multi-field project so that it can be modified for various purposes. The main aim of creating project on this topic is to show that Schools can use Structured Query languages to make their management system, This will also minimize the errors and also help the Schools to keep all the records related to Students and Teachers. There are many functions which can be performed in this management system and through the 6 tables which we have created the management can check the information regarding the students and also check the details about their fees and all. Teacher's Department and all other information regarding teacher can also be checked easily. Various Queries can be used to perform multiple function in this School Management System.

TOOLS USED

Minimum Hardware Requirements:

I.OPERATING SYSTEM   : Windows 7 (64-bit, Professional or higher)

II. PROCESSOR   : Intel Core 2 Quad   Q6600

III. Graphic Accelerators   : Nvidia GT 710
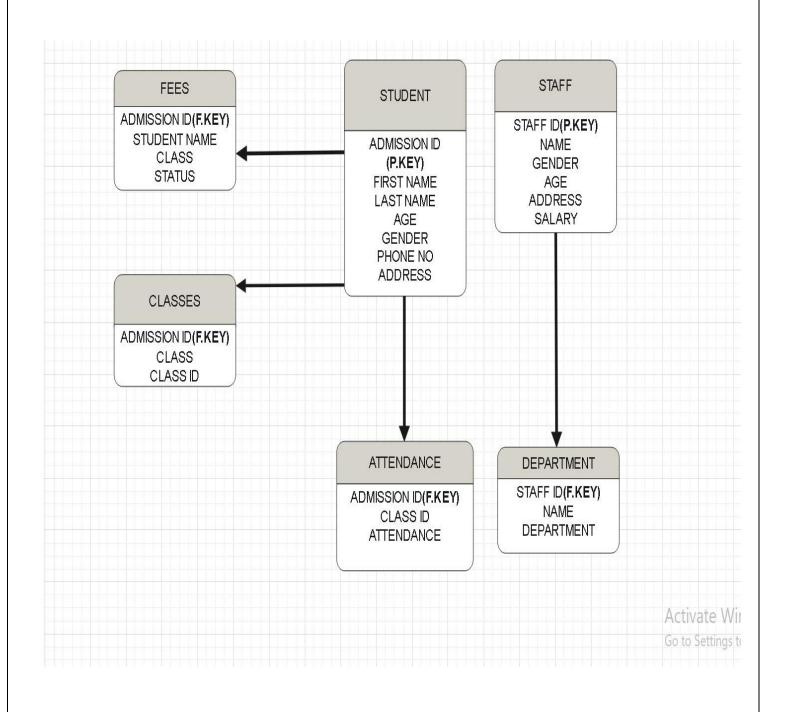
IV. RAM   : 8 GB

SOFTWARE REQUIRED:

MYSQL 8.0

School Management System Detail

Tables Used-

     I.   Student
   II.   Classes
  III.   Fees
  IV.   Attendance
   V.   Staff List
  VI.   Teacher Department

```
mysql> show tables;
+-------------------+
| Tables_in_project |
+-------------------+
| attendance        |
| classes           |
| department        |
| fees              |
| staff             |
| student           |
+-------------------+
6 rows in set (0.00 sec)
```

ER DIAGRAM

FEES

ADMISSION ID**(F.KEY)**
STUDENT NAME
CLASS
STATUS

STUDENT

ADMISSION ID
(P.KEY)
FIRST NAME
LAST NAME
AGE
GENDER
PHONE NO
ADDRESS

STAFF

STAFF ID**(P.KEY)**
NAME
GENDER
AGE
ADDRESS
SALARY

CLASSES

ADMISSION ID**(F.KEY)**
CLASS
CLASS ID

ATTENDANCE

ADMISSION ID**(F.KEY)**
CLASS ID
ATTENDANCE

DEPARTMENT

STAFF ID**(F.KEY)**
NAME
DEPARTMENT

QUERY USED TO CREATE THE DATABASE

- **Student Table**

  Create Table

```
mysql> create table student
    -> (ADMISSIONID     INT PRIMARY KEY,
    -> FIRSTNAME       CHAR(10),
    -> LASTNAME        CHAR(10),
    -> AGE             INT,
    -> GENDER          CHAR(7),
    -> PHONENO         INT,
    -> ADDRESS         VARCHAR(20)
    -> );
Query OK, 0 rows affected (0.06 sec)

mysql> DESC STUDENT;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| ADMISSIONID | int         | NO   | PRI | NULL    |       |
| FIRSTNAME   | char(10)    | YES  |     | NULL    |       |
| LASTNAME    | char(10)    | YES  |     | NULL    |       |
| AGE         | int         | YES  |     | NULL    |       |
| GENDER      | char(7)     | YES  |     | NULL    |       |
| PHONENO     | int         | YES  |     | NULL    |       |
| ADDRESS     | varchar(20) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
7 rows in set (0.00 sec)
```

Insert Data

```
mysql> INSERT INTO STUDENT VALUES('101','Aryan','Sharma','14','MALE','756849382','SECTOR 81');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO STUDENT VALUES('102','Ayush','Gupta','12','MALE','76756498','SECTOR 36');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO STUDENT VALUES('103','Ayushi','Agarwal','14','FEMALE','787234898','SECTOR 64');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO STUDENT VALUES('104','Ananya','Jaiswal','13','FEMALE','887234897','DLF');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO STUDENT VALUES('105','Ishan','Agarwal','11','MALE','987234825','Sector36');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO STUDENT VALUES('106','Ishika','Sharma','15','FEMALE','765723482','Sector 45');
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO STUDENT VALUES('107','Angad','Singh','13','MALE','635723441','Sector 27');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO STUDENT VALUES('108','Aryan','Khan','12','MALE','765754441','Sector 2');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO STUDENT VALUES('109','Kartik','Aryan','11','MALE','87555687','Sector 82');
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO STUDENT VALUES('110','Sid','Yadav','10','MALE','956532686','Sector 22');
Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO STUDENT VALUES('111','Kashish','Khatri','11','FEMALE','823467512','Sector 49');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO STUDENT VALUES('112','Kanishka','Saxena','10','FEMALE','993467559','Sector 13');
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO STUDENT VALUES('113','Vidhi','Shingle','14','FEMALE','695467559','Sector 55');
Query OK, 1 row affected (0.08 sec)

mysql> INSERT INTO STUDENT VALUES('114','Raj','Yadav','15','MALE','736467559','Sector 95');
Query OK, 1 row affected (0.01 sec)

mysql> select * from student;
+-------------+-----------+----------+-----+--------+-----------+-----------+
| ADMISSIONID | FIRSTNAME | LASTNAME | AGE | GENDER | PHONENO   | ADDRESS   |
+-------------+-----------+----------+-----+--------+-----------+-----------+
|         101 | Aryan     | Sharma   |  14 | MALE   | 756849382 | SECTOR 81 |
|         102 | Ayush     | Gupta    |  12 | MALE   | 76756498  | SECTOR 36 |
|         103 | Ayushi    | Agarwal  |  14 | FEMALE | 787234898 | SECTOR 64 |
|         104 | Ananya    | Jaiswal  |  13 | FEMALE | 887234897 | DLF       |
|         105 | Ishan     | Agarwal  |  11 | MALE   | 987234825 | Sector36  |
|         106 | Ishika    | Sharma   |  15 | FEMALE | 765723482 | Sector 45 |
|         107 | Angad     | Singh    |  13 | MALE   | 635723441 | Sector 27 |
|         108 | Aryan     | Khan     |  12 | MALE   | 765754441 | Sector 2  |
|         109 | Kartik    | Aryan    |  11 | MALE   | 87555687  | Sector 82 |
```

- **Classes Table**

  Create Table

```
mysql> create table classes
    -> (ADMISSIONID      INT,
    -> CLASS            VARCHAR(10),
    -> CLASSID          INT
    -> );
Query OK, 0 rows affected (0.06 sec)

mysql> ALTER TABLE CLASSES
    -> ADD FOREIGN KEY(ADMISSIONID) REFERENCES STUDENT(ADMISSIONID);
Query OK, 0 rows affected (0.09 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> DESC CLASSES;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| ADMISSIONID | int         | YES  | MUL | NULL    |       |
| CLASS       | varchar(10) | YES  |     | NULL    |       |
| CLASSID     | int         | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

Insert Data

```
mysql> INSERT INTO CLASSES VALUES('101','9th','009');
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO CLASSES VALUES('102','7th','007');
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO CLASSES VALUES('103','9th','009');
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO CLASSES VALUES('104','8th','008');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO CLASSES VALUES('105','6th','006');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO CLASSES VALUES('106','10th','010');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO CLASSES VALUES('107','8th','008');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO CLASSES VALUES('108','8th','008');
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO CLASSES VALUES('109','6th','006');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO CLASSES VALUES('110','6th','006');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO CLASSES VALUES('111','7th','007');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO CLASSES VALUES('112','6th','006');
Query OK, 1 row affected (0.12 sec)

mysql> INSERT INTO CLASSES VALUES('113','9th','009');
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO CLASSES VALUES('114','10th','010');
Query OK, 1 row affected (0.03 sec)
```

```
mysql> select * from classes;
+--------------+-------+---------+
| ADMISSIONID  | CLASS | CLASSID |
+--------------+-------+---------+
|          101 | 9th   |       9 |
|          102 | 7th   |       7 |
|          103 | 9th   |       9 |
|          104 | 8th   |       8 |
|          105 | 6th   |       6 |
|          106 | 10th  |      10 |
```

- **Attendance Table**

  Create Table

```
mysql> CREATE TABLE ATTENDANCE
    -> (ADMISSIONID      INT,
    -> CLASSID          INT,
    -> ATTENDANCE       VARCHAR(10)
    -> );
Query OK, 0 rows affected (0.26 sec)

mysql> ALTER TABLE ATTENDANCE
    -> ADD FOREIGN KEY(ADMISSIONID) REFERENCES STUDENT(ADMISSIONID);
Query OK, 0 rows affected (0.18 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> DESC ATTENDANCE;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| ADMISSIONID | int         | YES  | MUL | NULL    |       |
| CLASSID     | int         | YES  |     | NULL    |       |
| ATTENDANCE  | varchar(10) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
3 rows in set (0.03 sec)
```

Insert Data

```
mysql> INSERT INTO ATTENDANCE VALUES('101','9','87%');
Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO ATTENDANCE VALUES('102','7','95%');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO ATTENDANCE VALUES('103','9','75%');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO ATTENDANCE VALUES('104','8','83%');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO ATTENDANCE VALUES('105','6','97%');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO ATTENDANCE VALUES('106','10','73%');
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO ATTENDANCE VALUES('107','8','84%');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO ATTENDANCE VALUES('108','8','80%');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO ATTENDANCE VALUES('109','6','90%');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO ATTENDANCE VALUES('110','6','91%');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO ATTENDANCE VALUES('111','7','87%');
Query OK, 1 row affected (0.02 sec)

mysql> INSERT INTO ATTENDANCE VALUES('112','6','88%');
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO ATTENDANCE VALUES('113','9','81%');
Query OK, 1 row affected (0.53 sec)

mysql> INSERT INTO ATTENDANCE VALUES('114','10','71%');
Query OK, 1 row affected (0.02 sec)
```

```
mysql> select * from attendance;
+--------------+----------+------------+
| ADMISSIONID  | CLASSID  | ATTENDANCE |
+--------------+----------+------------+
|          101 |        9 | 87%        |
|          102 |        7 | 95%        |
|          103 |        9 | 75%        |
|          104 |        8 | 83%        |
|          105 |        6 | 97%        |
|          106 |       10 | 73%        |
|          107 |        8 | 84%        |
|          108 |        8 | 80%        |
|          109 |        6 | 90%        |
```

- **Fees Table**

  Create Table

```
mysql> CREATE TABLE FEES
    -> (ADMISSIONID      INT,
    -> STUDENTNAME      CHAR(20),
    -> CLASS            VARCHAR(10),
    -> STATUS           VARCHAR(15)
    -> );
Query OK, 0 rows affected (0.16 sec)

mysql> ALTER TABLE FEES
    -> ADD FOREIGN KEY(ADMISSIONID) REFERENCES STUDENT(ADMISSIONID);
Query OK, 0 rows affected (0.28 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> DESC FEES;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| ADMISSIONID | int         | YES  | MUL | NULL    |       |
| STUDENTNAME | char(20)    | YES  |     | NULL    |       |
| CLASS       | varchar(10) | YES  |     | NULL    |       |
| STATUS      | varchar(15) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

Insert Data

```
mysql> INSERT INTO FEES VALUES('101','Aryan Sharma','9','Paid');
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO FEES VALUES('102','Ayush Gupta','7','Paid');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO FEES VALUES('103','Ayushi Agarwal','9','Not Paid');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO FEES VALUES('104','Ananya Jaiswal','8','Paid');
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO FEES VALUES('105','Ishan Agarwal','6','Paid');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO FEES VALUES('106','Ishika Sharma','10','Not Paid');
Query OK, 1 row affected (0.03 sec)

mysql> INSERT INTO FEES VALUES('107','Angad Singh','8','Not Paid');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO FEES VALUES('108','Aryan Khan','8','Paid');
Query OK, 1 row affected (0.03 sec)
```

```
mysql> select * from fees;;
+-------------+----------------+-------+----------+
| ADMISSIONID | STUDENTNAME    | CLASS | STATUS   |
+-------------+----------------+-------+----------+
|         101 | Aryan Sharma   | 9     | Paid     |
|         102 | Ayush Gupta    | 7     | Paid     |
|         103 | Ayushi Agarwal | 9     | Not Paid |
|         104 | Ananya Jaiswal | 8     | Paid     |
|         105 | Ishan Agarwal  | 6     | Paid     |
|         106 | Ishika Sharma  | 10    | Not Paid |
|         107 | Angad Singh    | 8     | Not Paid |
|         108 | Aryan Khan     | 8     | Paid     |
|         109 | Kartik Aryan   | 6     | Paid     |
|         110 | Sid Yadav      | 6     | Paid     |
|         111 | Kashish Khatri | 7     | Not Paid |
|         112 | Kanishka Saxena| 6     | Paid     |
```

- **Staff Table**

  Create Table

```
mysql> CREATE TABLE STAFF
    -> (STAFFID          INT PRIMARY KEY,
    -> NAME              CHAR(20),
    -> GENDER            CHAR(7),
    -> AGE               INT,
    -> ADDRESS           VARCHAR(20),
    -> SALARY            INT
    -> );
Query OK, 0 rows affected (0.06 sec)

mysql> DESC STAFF;
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| STAFFID | int         | NO   | PRI | NULL    |       |
| NAME    | char(20)    | YES  |     | NULL    |       |
| GENDER  | char(7)     | YES  |     | NULL    |       |
| AGE     | int         | YES  |     | NULL    |       |
| ADDRESS | varchar(20) | YES  |     | NULL    |       |
| SALARY  | int         | YES  |     | NULL    |       |
+---------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

Insert Data

```
mysql> insert into staff values('10001','Dhruv Ahuja','Male','36','Chhatarpur','45000');
Query OK, 1 row affected (0.10 sec)

mysql> insert into staff values('10002','Harsh Yadav','Male','32','Sector 99','40000');
Query OK, 1 row affected (0.04 sec)

mysql> insert into staff values('10003','Alisha Chabra','Female','30','Sector 22','35000');
Query OK, 1 row affected (0.02 sec)

mysql> insert into staff values('10004','Rishabh Gupta','Male','40','DLF','65000');
Query OK, 1 row affected (0.03 sec)

mysql> insert into staff values('10005','Rahul Gangwar','Male','38','Sector 72','47000');
Query OK, 1 row affected (0.02 sec)

mysql> insert into staff values('10006','Yash Garg','Male','33','Sector 32','37000');
Query OK, 1 row affected (0.02 sec)

mysql> insert into staff values('10007','Suman Yadav','Female','45','Sector 19','50000');
Query OK, 1 row affected (0.03 sec)

mysql> insert into staff values('10008','Mayuka','Female','31','Sector 6','35000');
Query OK, 1 row affected (0.03 sec)

mysql> insert into staff values('10009','Mayank Sharma','Male','35','Sector 34','36500');
Query OK, 1 row affected (0.02 sec)

mysql> insert into staff values('10010','Priya Agarwal','Female','31','Sector 67','32500');
Query OK, 1 row affected (0.49 sec)
```

```
mysql> select * from staff
    -> ;
+---------+---------------+--------+-----+------------+--------+
| STAFFID | NAME          | GENDER | AGE | ADDRESS    | SALARY |
+---------+---------------+--------+-----+------------+--------+
|   10001 | Dhruv Ahuja   | Male   |  36 | Chhatarpur |  45000 |
|   10002 | Harsh Yadav   | Male   |  32 | Sector 99  |  40000 |
|   10003 | Alisha Chabra | Female |  30 | Sector 22  |  35000 |
|   10004 | Rishabh Gupta | Male   |  40 | DLF        |  65000 |
|   10005 | Rahul Gangwar | Male   |  38 | Sector 72  |  47000 |
|   10006 | Yash Garg     | Male   |  33 | Sector 32  |  37000 |
|   10007 | Suman Yadav   | Female |  45 | Sector 19  |  50000 |
|   10008 | Mayuka        | Female |  31 | Sector 6   |  35000 |
|   10009 | Mayank Sharma | Male   |  35 | Sector 34  |  36500 |
```

- **Department Table**

  Create Table

```
mysql> CREATE TABLE DEPARTMENT
    -> (STAFFID           INT,
    -> NAME               CHAR(15),
    -> DEPARTMENT         VARCHAR(15)
    -> );
Query OK, 0 rows affected (0.07 sec)

mysql> ALTER TABLE DEPARTMENT
    -> ADD FOREIGN KEY(STAFFID) REFERENCES STAFF(STAFFID);
Query OK, 0 rows affected (0.13 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> DESC DEPARTMENT;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| STAFFID    | int         | YES  | MUL | NULL    |       |
| NAME       | char(15)    | YES  |     | NULL    |       |
| DEPARTMENT | varchar(15) | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

Insert Data

```
mysql> insert into department values('10001','Dhruv Ahuja','SST');
Query OK, 1 row affected (0.04 sec)

mysql> insert into department values('10002','Harsh Yadav','MATHS');
Query OK, 1 row affected (0.06 sec)

mysql> insert into department values('10003','Alisha Chabra','ENGLISH');
Query OK, 1 row affected (0.02 sec)

mysql> insert into department values('10004','Rishabh Gupta','SCIENCE');
Query OK, 1 row affected (0.02 sec)

mysql> insert into department values('10005','Rahul Gangwar','Computers');
Query OK, 1 row affected (0.02 sec)

mysql> insert into department values('10006','Yash Garg','SST');
Query OK, 1 row affected (0.02 sec)

mysql> insert into department values('10007','Suman Yadav','HINDI');
Query OK, 1 row affected (0.03 sec)

mysql> insert into department values('10008','Mayuka','SCIENCE');
Query OK, 1 row affected (0.02 sec)

mysql> insert into department values('10009','Mayansh Sharma','Maths');
Query OK, 1 row affected (0.02 sec)

mysql> insert into department values('10010','Priya Agarwal','SST');
Query OK, 1 row affected (0.04 sec)
```

```
mysql> select * from department;
+----------+----------------+------------+
| STAFFID  | NAME           | DEPARTMENT |
+----------+----------------+------------+
|    10001 | Dhruv Ahuja    | SST        |
|    10002 | Harsh Yadav    | MATHS      |
|    10003 | Alisha Chabra  | ENGLISH    |
|    10004 | Rishabh Gupta  | SCIENCE    |
|    10005 | Rahul Gangwar  | Computers  |
|    10006 | Yash Garg      | SST        |
|    10007 | Suman Yadav    | HINDI      |
|    10008 | Mayuka         | SCIENCE    |
|    10009 | Mayansh Sharma | Maths      |
|    10010 | Priya Agarwal  | SST        |
+----------+----------------+------------+
```

Stored Database Query Operations :-

Q1. Query to Show the Total Admission.

```
mysql> select * from student;
+-------------+-----------+----------+-----+--------+-----------+-----------+
| ADMISSIONID | FIRSTNAME | LASTNAME | AGE | GENDER | PHONENO   | ADDRESS   |
+-------------+-----------+----------+-----+--------+-----------+-----------+
|         101 | Aryan     | Sharma   |  14 | MALE   | 756849382 | SECTOR 81 |
|         102 | Ayush     | Gupta    |  12 | MALE   |  76756498 | SECTOR 36 |
|         103 | Ayushi    | Agarwal  |  14 | FEMALE | 787234898 | SECTOR 64 |
|         104 | Ananya    | Jaiswal  |  13 | FEMALE | 887234897 | DLF       |
|         105 | Ishan     | Agarwal  |  11 | MALE   | 987234825 | Sector36  |
|         106 | Ishika    | Sharma   |  15 | FEMALE | 765723482 | Sector 45 |
|         107 | Angad     | Singh    |  13 | MALE   | 635723441 | Sector 27 |
|         108 | Aryan     | Khan     |  12 | MALE   | 765754441 | Sector 2  |
|         109 | Kartik    | Aryan    |  11 | MALE   |  87555687 | Sector 82 |
|         110 | Sid       | Yadav    |  10 | MALE   | 956532686 | Sector 22 |
|         111 | Kashish   | Khatri   |  11 | FEMALE | 823467512 | Sector 49 |
|         112 | Kanishka  | Saxena   |  10 | FEMALE | 993467559 | Sector 13 |
|         113 | Vidhi     | Shingle  |  14 | FEMALE | 695467559 | Sector 55 |
|         114 | Raj       | Yadav    |  15 | MALE   | 736467559 | Sector 95 |
+-------------+-----------+----------+-----+--------+-----------+-----------+
14 rows in set (0.00 sec)
```

Q2. Query to Show the Age of all the Students.

```
mysql> select age from student;
+------+
| age  |
+------+
|   14 |
|   12 |
|   14 |
|   13 |
|   11 |
|   15 |
|   13 |
|   12 |
|   11 |
|   10 |
|   11 |
|   10 |
|   14 |
```

Q3. Query to Show the Student having the highest attendance.

```
mysql> select age from student;
+------+
| age  |
+------+
|   14 |
|   12 |
|   14 |
|   13 |
|   11 |
|   15 |
|   13 |
|   12 |
|   11 |
|   10 |
|   11 |
|   10 |
|   14 |
|   15 |
+------+
14 rows in set (0.00 sec)
```

Q4. Query to show the students of a specific class.

```
mysql> select * from classes;
+-------------+-------+---------+
| ADMISSIONID | CLASS | CLASSID |
+-------------+-------+---------+
|         101 | 9th   |       9 |
|         102 | 7th   |       7 |
|         103 | 9th   |       9 |
|         104 | 8th   |       8 |
|         105 | 6th   |       6 |
|         106 | 10th  |      10 |
|         107 | 8th   |       8 |
|         108 | 8th   |       8 |
|         109 | 6th   |       6 |
|         110 | 6th   |       6 |
|         111 | 7th   |       7 |
|         112 | 6th   |       6 |
|         113 | 9th   |       9 |
|         114 | 10th  |      10 |
+-------------+-------+---------+
14 rows in set (0.00 sec)

mysql> Select admissionid from classes where classid='9';
+-------------+
| admissionid |
```

Q5. Query to show the fee status of the students.

```
mysql> select * from fees;;
+-------------+----------------+-------+----------+
| ADMISSIONID | STUDENTNAME    | CLASS | STATUS   |
+-------------+----------------+-------+----------+
|         101 | Aryan Sharma   | 9     | Paid     |
|         102 | Ayush Gupta    | 7     | Paid     |
|         103 | Ayushi Agarwal | 9     | Not Paid |
|         104 | Ananya Jaiswal | 8     | Paid     |
|         105 | Ishan Agarwal  | 6     | Paid     |
|         106 | Ishika Sharma  | 10    | Not Paid |
|         107 | Angad Singh    | 8     | Not Paid |
|         108 | Aryan Khan     | 8     | Paid     |
|         109 | Kartik Aryan   | 6     | Paid     |
|         110 | Sid Yadav      | 6     | Paid     |
|         111 | Kashish Khatri | 7     | Not Paid |
|         112 | Kanishka Saxena| 6     | Paid     |
|         113 | Vidhi Shingle  | 9     | Paid     |
|         114 | Raj Yadav      | 10    | Not Paid |
+-------------+----------------+-------+----------+
14 rows in set (0.00 sec)
```

Q6. Query to show the fee status of students that has paid the fee.

```
mysql> select * from fees where status='paid';
+-------------+----------------+-------+--------+
| ADMISSIONID | STUDENTNAME    | CLASS | STATUS |
+-------------+----------------+-------+--------+
|         101 | Aryan Sharma   | 9     | Paid   |
|         102 | Ayush Gupta    | 7     | Paid   |
|         104 | Ananya Jaiswal | 8     | Paid   |
|         105 | Ishan Agarwal  | 6     | Paid   |
|         108 | Aryan Khan     | 8     | Paid   |
|         109 | Kartik Aryan   | 6     | Paid   |
|         110 | Sid Yadav      | 6     | Paid   |
|         112 | Kanishka Saxena| 6     | Paid   |
|         113 | Vidhi Shingle  | 9     | Paid   |
+-------------+----------------+-------+--------+
9 rows in set (0.00 sec)
```

Q7. Query to show the detail about female teachers in the School.

```
mysql> select * from staff where gender='female';
+---------+----------------+--------+------+-----------+--------+
| STAFFID | NAME           | GENDER | AGE  | ADDRESS   | SALARY |
+---------+----------------+--------+------+-----------+--------+
|   10003 | Alisha Chabra  | Female |   30 | Sector 22 |  35000 |
|   10007 | Suman Yadav    | Female |   45 | Sector 19 |  50000 |
|   10008 | Mayuka         | Female |   31 | Sector 6  |  35000 |
|   10010 | Priya Agarwal  | Female |   31 | Sector 67 |  32500 |
+---------+----------------+--------+------+-----------+--------+
4 rows in set (0.00 sec)
```

Q8. Query to insert details about new student.

```
mysql> select * from student;
+-------------+-----------+----------+------+--------+-----------+-----------+
| ADMISSIONID | FIRSTNAME | LASTNAME | AGE  | GENDER | PHONENO   | ADDRESS   |
+-------------+-----------+----------+------+--------+-----------+-----------+
|         101 | Aryan     | Sharma   |   14 | MALE   | 756849382 | SECTOR 81 |
|         102 | Ayush     | Gupta    |   12 | MALE   |  76756498 | SECTOR 36 |
|         103 | Ayushi    | Agarwal  |   14 | FEMALE | 787234898 | SECTOR 64 |
|         104 | Ananya    | Jaiswal  |   13 | FEMALE | 887234897 | DLF       |
|         105 | Ishan     | Agarwal  |   11 | MALE   | 987234825 | Sector36  |
|         106 | Ishika    | Sharma   |   15 | FEMALE | 765723482 | Sector 45 |
|         107 | Angad     | Singh    |   13 | MALE   | 635723441 | Sector 27 |
|         108 | Aryan     | Khan     |   12 | MALE   | 765754441 | Sector 2  |
|         109 | Kartik    | Aryan    |   11 | MALE   |  87555687 | Sector 82 |
|         110 | Sid       | Yadav    |   10 | MALE   | 956532686 | Sector 22 |
|         111 | Kashish   | Khatri   |   11 | FEMALE | 823467512 | Sector 49 |
|         112 | Kanishka  | Saxena   |   10 | FEMALE | 993467559 | Sector 13 |
|         113 | Vidhi     | Shingle  |   14 | FEMALE | 695467559 | Sector 55 |
|         114 | Raj       | Yadav    |   15 | MALE   | 736467559 | Sector 95 |
+-------------+-----------+----------+------+--------+-----------+-----------+
14 rows in set (0.00 sec)

mysql> insert into student values('115','Manas','Ahuja','13','Male','639562248','Cyber City');
Query OK, 1 row affected (0.02 sec)

mysql> select * from student;
+-------------+-----------+----------+------+--------+-----------+-----------+
| ADMISSIONID | FIRSTNAME | LASTNAME | AGE  | GENDER | PHONENO   | ADDRESS   |
+-------------+-----------+----------+------+--------+-----------+-----------+
|         101 | Aryan     | Sharma   |   14 | MALE   | 756849382 | SECTOR 81 |
|         102 | Ayush     | Gupta    |   12 | MALE   |  76756498 | SECTOR 36 |
|         103 | Ayushi    | Agarwal  |   14 | FEMALE | 787234898 | SECTOR 64 |
|         104 | Ananya    | Jaiswal  |   13 | FEMALE | 887234897 | DLF       |
|         105 | Ishan     | Agarwal  |   11 | MALE   | 987234825 | Sector36  |
|         106 | Ishika    | Sharma   |   15 | FEMALE | 765723482 | Sector 45 |
|         107 | Angad     | Singh    |   13 | MALE   | 635723441 | Sector 27 |
|         108 | Aryan     | Khan     |   12 | MALE   | 765754441 | Sector 2  |
|         109 | Kartik    | Aryan    |   11 | MALE   |  87555687 | Sector 82 |
```

Q9. Query to check teachers of certain department.

```
mysql> select * from department where department='SST';
+---------+---------------+------------+
| STAFFID | NAME          | DEPARTMENT |
+---------+---------------+------------+
|   10001 | Dhruv Ahuja   | SST        |
|   10006 | Yash Garg     | SST        |
|   10010 | Priya Agarwal | SST        |
+---------+---------------+------------+
3 rows in set (0.00 sec)
```

Q10. Query to change the department of a teacher.

```
mysql> select * from department;
+---------+----------------+------------+
| STAFFID | NAME           | DEPARTMENT |
+---------+----------------+------------+
|   10001 | Dhruv Ahuja    | SST        |
|   10002 | Harsh Yadav    | MATHS      |
|   10003 | Alisha Chabra  | ENGLISH    |
|   10004 | Rishabh Gupta  | SCIENCE    |
|   10005 | Rahul Gangwar  | Computers  |
|   10006 | Yash Garg      | SST        |
|   10007 | Suman Yadav    | HINDI      |
|   10008 | Mayuka         | SCIENCE    |
|   10009 | Mayansh Sharma | Maths      |
|   10010 | Priya Agarwal  | SST        |
+---------+----------------+------------+
10 rows in set (0.00 sec)

mysql> update department
    -> set        department='SCIENCE'
    -> where      staffid='10001';
Query OK, 1 row affected (0.05 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from department;
+---------+----------------+------------+
| STAFFID | NAME           | DEPARTMENT |
+---------+----------------+------------+
|   10001 | Dhruv Ahuja    | SCIENCE    |
|   10002 | Harsh Yadav    | MATHS      |
|   10003 | Alisha Chabra  | ENGLISH    |
|   10004 | Rishabh Gupta  | SCIENCE    |
```

Q11. Query to select the students whose name start from A.

```
mysql> select * from student WHERE FIRSTNAME Like 'a%';
+-------------+-----------+----------+-----+--------+-----------+-----------+
| ADMISSIONID | FIRSTNAME | LASTNAME | AGE | GENDER | PHONENO   | ADDRESS   |
+-------------+-----------+----------+-----+--------+-----------+-----------+
|         101 | Aryan     | Sharma   |  14 | MALE   | 756849382 | SECTOR 81 |
|         102 | Ayush     | Gupta    |  12 | MALE   |  76756498 | SECTOR 36 |
|         103 | Ayushi    | Agarwal  |  14 | FEMALE | 787234898 | SECTOR 64 |
|         104 | Ananya    | Jaiswal  |  13 | FEMALE | 887234897 | DLF       |
|         107 | Angad     | Singh    |  13 | MALE   | 635723441 | Sector 27 |
|         108 | Aryan     | Khan     |  12 | MALE   | 765754441 | Sector 2  |
+-------------+-----------+----------+-----+--------+-----------+-----------+
6 rows in set (0.00 sec)
```

Q11. Query to select the student whose attendance lies between 85% and 92%.

```
mysql> select * from attendance where attendance between 85 and 92;
+-------------+---------+------------+
| ADMISSIONID | CLASSID | ATTENDANCE |
+-------------+---------+------------+
|         101 |       9 | 87%        |
|         109 |       6 | 90%        |
|         110 |       6 | 91%        |
|         111 |       7 | 87%        |
|         112 |       6 | 88%        |
+-------------+---------+------------+
5 rows in set, 14 warnings (0.00 sec)
```

Q12. Query to select the student of certain age.

```
mysql> select * from student where AGE IN(14);
+-------------+-----------+----------+-----+--------+-----------+-----------+
| ADMISSIONID | FIRSTNAME | LASTNAME | AGE | GENDER | PHONENO   | ADDRESS   |
+-------------+-----------+----------+-----+--------+-----------+-----------+
|         101 | Aryan     | Sharma   |  14 | MALE   | 756849382 | SECTOR 81 |
```