Lab Activity 2

Create a table STUDENT with under mentioned structure by using SQL Statement:

StdID	Number	Primary Key
StdName	Character (30)	NOT NULL
Sex	Character(6)	Male or Female
Percentage	Number	
SClass	Number	
Sec	Character	
Stream	Character(10)	Science or Commerce
DOB	Date	Date of Birth

Step 1: create table as:

```
CREATE TABLE Student (
StdID INT(4) PRIMARY KEY, StdName VARCHAR(30) NOT NULL, Sex
VARCHAR(1), Percentage DECIMAL(5,2), SClass INT , Sec
VARCHAR(1), Stream VARCHAR(10), DOB DATE );
```

Step2: Insert records into STUDENT table.

INSERT INTO Student VALUES (1001, 'AKSHRA AGARWAL,'FEMALE',70,11,'A', 'Science','10/11/1996');

Step3 Similarly like step 2, enter other records of the following table

StdID	StdName	Sex	Percentage	Class	Sec	Stream	DOB
1001	AKSHRA AGARWAL	FEMALE	70	11	A	Science	10/11/1996
1002	ANJANI SHARMA	FEMALE	75	11	A	Commerce	18/09/1996
1003	ANSHUL SAXENA	MALE	78	11	A	Commerce	19/11/1996
1004	AISHWARYA SINGH	FEMALE	79	11	A	Commerce	1/11/1996
1005	AKRITI SAXENA	FEMALE	76	11	A	Commerce	20/09/1996
1006	KHUSHI AGARWAL	FEMALE	77	11	A	Commerce	14/09/2003
1007	MAAHI AGARWAL	FEMALE	74	11	A	Science	21/04/1997
1008	MITALI GUPTA	FEMALE	78	12	A	Science	26/11/1997
1009	NIKUNJ AGARWAL	MALE	58	12	A	Science	12/7/1997
1010	PARKHI	FEMALE	59	12	A	Commerce	20/12/1997
1011	PRAKHAR TIWARI	MALE	43	12	A	Science	22/04/1997
1012	RAGHAV GANGWAR	MALE	58	12	A	Commerce	21/12/1997
1013	SAHIL SARASWAT	MALE	57	12	A	Commerce	13/08/1997

1014	SWATI MISHRA	FEMALE	98	11	A	Science	13/08/1996
1015	HARSH AGARWAL	MALE	58	11	B	Science	28/08/2003
1016	HARSHIT KUMAR	MALE	98	11	B	Science	22/05/2003
1017	JAHANVI KAPOOR	MALE	65	11	B	Science	10/1/1997
1018	STUTI MISHRA	MALE	66	11	C	Commerce	10/1/1996
1019	SURYANSH KUMARAGARWAL	MALE	85	11	C	Commerce	22/08/2007
1020	TANI RASTOGI	FEMALE	75	12	C	Commerce	15/01/1998
1021	TANISHK GUPTA	MALE	55	12	C	Science	11/4/1998
1022	TANMAY AGARWAL	MALE	57	11	C	Commerce	28/06/1998
1023	YASH SAXENA	MALE	79	11	C	Science	13/3/1998
1024	YESH DUBEY	MALE	85	12	C	Commerce	3/4/1998

Lab Activity 3

Select student table (Refer to **Lab Activity 1/ Assignmnet 2**) and use following SQL statements. TYPE THE STATEMENT, PRESS ENTER AND NOTE THE OUTPUT

1 To display all the records form STUDENT table.

SELECT * FROM student ;

2. To display only name and date of birth from the table STUDENT.

SELECT StdName, DOB FROM student ;

3. To display all students record where percentage is greater of equal to 80 FROM student table.

SELECT * FROM student WHERE percentage >= 80;

4. To display student name, stream and percentage where percentage of student is more than 80

SELECT StdName, Stream, Percentage WHERE percentage > 80;

5. To display all records of science students whose percentage is more than 75 form student table.

SELECT * FORM student WHERE stream = ‘Science’ AND percentage > 75;

Lab Activity 4

Select student table (Refer to **Lab Activity 1/ Assignmnet 2**) and use following SQL statements. TYPE THE STATEMENT, PRESS ENTER AND NOTE THE OUTPUT

1. To display the STUDENT table structure.

DESCRIBE Student;

2. To add a column (FIELD) in the STUDENT table, for example TeacherID as VARCHAR(20);

ALTER TABLE Student ADD TeacherID VARCHAR(20);

3. Type the statement

DESC Student;

Press enter key, now note the difference in table structure

4.Type the statement and press enter key, note the new field that you have added as TeacherID

SELECT * FROM student;

5. To modify the TeacherID data type form character to integer.

ALTER TABLE Student MODIFY TeacherID INTEGER ; DESC Student;

SELECT * FROM student;

Lab Activity 5

Select student table (Refer to **Lab Activity 1/ Assignmnet 2**) and use following SQL statements. TYPE THE STATEMENT, PRESS ENTER AND NOTE THE OUTPUT

1. To Drop (Delete) a field form a table. For e.g you want to delete TeacherID field.

ALTER TABLE Student DROP TeacherID;

2. To subtract 5 form all students percentage and display name and percentage.

SELECT name, percentage - 5 FROM Student;

3. Using column alise for example we want to display StdName as Student Name and DOB as Date of Birth then the statement will be.

```
SELECT StdName AS "Student Name",

DOB As "Date of Birth" FROM Student;
```

4. Display the name of all students whose stream is not Science

SELECT StdNameFROMstudent WHERE Stream<>'Science';

5. Display all name and percentage where percentage is between 60 and 80

SELECT StdName, percentage **FROM** student **WHERE** percentage >=60 **AND** percentage<=80 ;

Lab Activity 6

Select student table (Refer to **Lab Activity 1/ Assignmnet 2**) and use following SQL statements. TYPE THE STATEMENT, PRESS ENTER AND NOTE THE OUTPUT

1. To change a student name from SWATI MISHRA to SWATI VERMA whose StdID is 1014 and also change percentage 86.

UPDATE Student **SET** StdName = 'SWATI VERMA', percentage = 86 **WHERE** StdId = 1014;

2. To delete the records form student table where StdId is 1016.

DELETE FROM Student **WHERE** StdID = 1016**;**

3. Type the following SQL statement and note the output.

```
SELECT * FROM Student WHERE StdName LIKE 'G_' ;

SELECT * FROM Student WHERE StdName='G';

SELECT * FROM Student WHERE StdName LIKE 'G%' ;

SELECT * WHERE Student WHERE StdName='%G%' ;
```

4. Display all the streams in student table.

SELECT DISTINCT Stream FROM Student;

5. Note the output of the following statement.

SELECT StdName, Sex, Stream **FROM** Student **WHERE** percentage **BETWEEN** 70 **AND** 80;