

DATABASE FOUNDATION

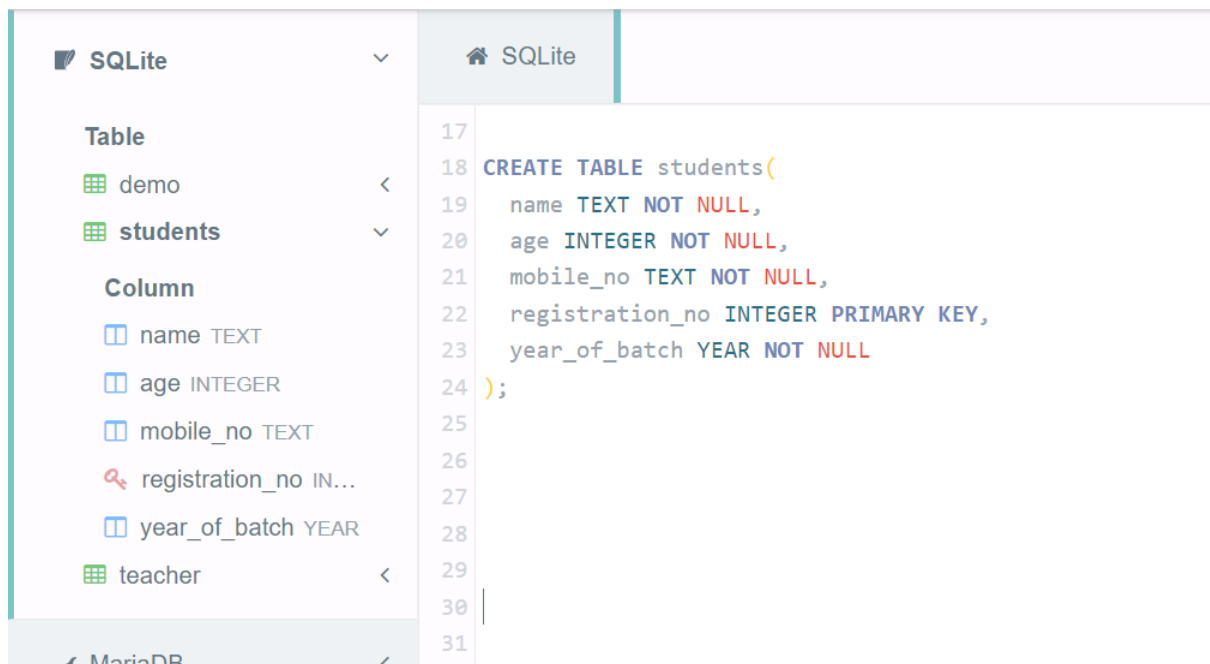
(SQLite)

Assignment 1: Create a DB for your college with following parameters:

1. Create a table for students with name, age, mobile no, registration no., year of batch as columns.
2. Create a table for teachers with name, domain, department as column
3. Write a query to insert 10 students data and 10 teachers data in the respective table
4. Write a query to fetch all the students from 2020 batch
5. Write a query to fetch all teachers from CS department
6. Write a query to edit at least 3 records of students
7. Write a query to delete 2 records from teachers table.

CODE

1. Create a table for students with name, age, mobile no, registration no., year of batch as columns.



The screenshot displays a SQLite database interface. On the left, a sidebar shows the database structure: a table named 'demo' and another named 'students'. The 'students' table is expanded, showing its columns: 'name' (TEXT), 'age' (INTEGER), 'mobile_no' (TEXT), 'registration_no' (INTEGER PRIMARY KEY), and 'year_of_batch' (YEAR). Below this, a 'teacher' table is also visible. The main area on the right shows the SQL code to create the 'students' table:

```
17  
18 CREATE TABLE students(  
19     name TEXT NOT NULL,  
20     age INTEGER NOT NULL,  
21     mobile_no TEXT NOT NULL,  
22     registration_no INTEGER PRIMARY KEY,  
23     year_of_batch YEAR NOT NULL  
24 );  
25  
26  
27  
28  
29  
30  
31
```

2. Create a table for teachers with name, domain, department as column



3. Write a query to insert 10 students data and 10 teachers data in the respective table

STUDENT TABLE

```
INSERT INTO students (name,age,mobile_no,registration_no,year_of_batch) VALUES  
( 'karthik',20,'9876765676',1,2018),  
( 'logesh',21,'9876545676',2,2018),  
( 'abi',19,'8765678765',3,2020),  
( 'gopi',22,'8767987656',4,2017),  
( 'priya',23,'9876567656',5,2017),  
( 'subi',18,'9456765678',6,2021),  
( 'kavin',20,'9876567656',7,2018),  
( 'praba',18,'9876767678',8,2020),  
( 'tom',18,'8767879656',9,2021),  
( 'john',17,'9876776876',10,2022);
```

```
73  
74 SELECT * FROM students;
```

name	age	mobile_no	registration_no	year_of_batch
karthik	20	9876765676	1	2018
logesh	21	9876545676	2	2018
abi	19	8765678765	3	2020
gopi	22	8767987656	4	2017
priya	23	9876567656	5	2017
subi	18	9456765678	6	2021
kavin	20	9876567656	7	2018
praba	18	9876767678	8	2020
tom	18	8767879656	9	2021
john	17	9876776876	10	2022

TEACHER TABLE

```
18  
19  
20  
21  
22 INSERT INTO teacher (id,name,domain,department) VALUES  
23 (1,'muthu','Maths','CSE'),  
24 (2,'kevin','Java','CSE'),  
25 (3,'hemanth','Database','IT'),  
26 (4,'vaani','Operating System','IT'),  
27 (5,'george','Computer Networks','CSE'),  
28 (6,'arul','Engineering Drawing and Graphics','CIVIL'),  
29 (7,'indhu','Thermodynamics','MECHANICAL'),  
30 (8,'divya','CAD/CAM','MECHANICAL'),  
31 (9,'mary','Microcontroller','EEE'),  
32 (10,'peter','Fluid-Mechanics','MECHANICAL');
```

SQLite				
1	SELECT * FROM teacher;			
2				
	id	name	domain	department
1		muthu	Maths	CSE
2		kevin	Java	CSE
3		hemanth	Database	IT
4		vaani	Operating System	IT
5		george	Computer Networks	CSE
6		arul	Engineering Drawing and Graphics	CIVIL
7		indhu	Thermodynamics	MECHANICAL
8		divya	CAD/CAM	MECHANICAL
9		mary	Microcontroller	EEE
10		peter	Fluid-Mechanics	MECHANICAL

4. Write a query to fetch all the students from 2020 batch

32					
33	SELECT * FROM students WHERE year_of_batch=2020;				
34					
35					
36					
37		name	age	mobile_no	registration_no
					year_of_batch
	abi	19	8765678765	3	2020
	praba	18	9876767678	8	2020

5. Write a query to fetch all teachers from CS department

SQLite

1

2

3

4

5

6

id

name

domain

department

1

muthu

Maths

CSE

2

kevin

Java

CSE

5

george

Computer Networks

CSE

6. Write a query to edit at least 3 records of students

8

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10

11

UPDATE students SET age=20 WHERE year_of_batch=2018;

SELECT * FROM students;

name	age	mobile_no	registration_no	year_of_batch	
karthik	20	9876765676	1	2018	
logesh	20	9876545676	2	2018	
abi	19	8765678765	3	2020	
gopi	22	8767987656	4	2017	
priya	23	9876567656	5	2017	
subi	18	9456765678	6	2021	
kavin	20	9876567656	7	2018	
praba	18	9876767678	8	2020	
tom	18	8767879656	9	2021	
1	2	17	9876776876	10	2022

7. Write a query to delete 2 records from teachers table.

▼	SQLite	📄
	1	
<	2	DELETE FROM teacher WHERE department='IT';
	3	
<	4	SELECT * FROM teacher;
<	⋮	id
		name
		domain
		department
<	1	muthu
		Maths
		CSE
<	2	kevin
		Java
		CSE
<	5	george
		Computer Networks
		CSE
<	6	arul
		Engineering Drawing and Graphics
		CIVIL
<	7	indhu
		Thermodynamics
		MECHANICAL
<	8	divya
		CAD/CAM
		MECHANICAL
<	9	mary
		Microcontroller
		EEE
<	10	peter
		Fluid-Mechanics
		MECHANICAL