

10.	13/10/25	CRUD operations in document databases	18	12/10/25 12/10/25
-----	----------	---------------------------------------	----	---------------------------------

3/10/25

Task-10: CRUD operations in document databases

Aim:-

To perform CRUD operations in document databases.

College Management Database in SQL:

Step-1: Create Database

```
CREATE DATABASE College DB;
```

```
USE college DB;
```

Step-2: Create Tables

```
CREATE TABLE Students (  
  student-id INT PRIMARY KEY AUTO-INCREMENT,  
  name VARCHAR (100);  
  roll-no VARCHAR(20) UNIQUE;  
  department VARCHAR (50),  
  age INT
```

```
);
```

```
CREATE TABLE Courses (  
  course-id INT PRIMARY KEY AUTO-INCREMENT,  
  course-name VARCHAR (100),  
  course-code VARCHAR (20) UNIQUE,  
  Credits INT,
```

```
);
```

```
CREATE TABLE Staff (  
  Staff-ID INT PRIMARY KEY AUTO,  
  Increment,  
  name VARCHAR (100),  
  role VARCHAR (50),  
  department VARCHAR (50),
```

```
);
```

Step-3: Insert Records

```
INSERT INTO Students (name, roll-no, department, age)  
VALUES ('Alice Johnson', 'S101', 'Computer Science', 20),
```


INSERT INTO ~~Students~~ Students (name, roll-no, department, age).

(~~Bob~~ Smith', '5102', 'Mechanical', 21);
(Charlie Brown', '5103', 'Civil', 19);

Courses

INSERT INTO courses (course-name, course-code, credits).
VALUES

('DATABASE SYSTEM', 'CS301', 4),
(Thermodynamics', 'ME201', 3),
(Structural Analysis', 'CE101', 4);

Staff

INSERT INTO staff (name, role, department)
VALUES

('Dr. Smith', 'professor', 'Computer science'),
(Dr. John', 'lecturer', 'mechanical'),
(Dr. Anne', 'HOD', 'Civil');

Step-4: Read Query Records

select * from students Where department = 'Computer science';

S.No	Name	Roll no	Department	Age
1.	Alice Johnson	5101	Computer Science	20

select * from courses where credits = '4';

S.No.	Course-name	course-code	Credits
1	Database systems	CS301	4
2	Structural Analysis	CE101	4

Step-5: Update Records

UPDATE students

SET age = 21

WHERE roll-no = '5101';

UPDATE courses

SET credits = 4

WHERE course-code = 'ME201';

Step-6: Delete Records

DELETE FROM students WHERE rollno = '5103',
DELETE FROM Courses WHERE Course - code = 'CE101',
DELETE FROM Staff WHERE name = 'Dr. John';

VEL TECH - CSE	
EX NO.	10
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
SIGN WITH DATE	13/00/22

Result:-

Thus, the CRUD operations in document databases are executed successfully.