

(13/10/25)

Task 10: CRUD operations in document databases.

Aim: To CRUD operations in document databases.

College Management Database in SQL.

Step 1: Create Database.

```
CREATE DATABASE CollegeDB;  
USE CollegeDB;
```

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 (name, roll-no, department,
age).

('Bob Smith', 's102', 'Mechanical', 21),

('Charlie Brown', 's103', 'Civil', 19);

Courses

INSERT INTO Courses (course-name, course-code,
credits).

VALUES.

('Database system', 'CS301', 4),

('Thermodynamics', 'ME201', 3),

('Structural Analysis', 'CE201', 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	S101	Computer science.	20.

Select * from students courses where credits = 4;

S.no.	Course - name.	Course - Code.	Credits.
1.	Database. systems.	IS301	4.
2.	Structural. Analysis.	CE101	4.

Step 5: Update Records

UPDATE students

SET age = 21.

WHERE roll-no = 'S101';

UPDATE courses

SET Credits = 4.

WHERE Course - Code = 'ME201';

Step 6: Delete Records.

DELETE from students where roll-no = 'S103';

DELETE from courses where Course - Code = 'CE101';

DELETE from staff where name = 'Dr. John';

VEL TECH	
EX NO.	10
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
SIGN WITH DATE	

Result > Thus, the CRUD operations. in 13/04/23
document databases is executed
successfully.