

Here's a sequence of DBMS query examples for a **Student Database**:

## 1. CREATE TABLE

Create a table to store student information.

```
CREATE TABLE Students (  
    student_id INT PRIMARY KEY,  
    first_name VARCHAR(50),  
    last_name VARCHAR(50),  
    birth_date DATE,  
    gender CHAR(1),  
    course VARCHAR(100)  
);
```

## 2. INSERT INTO

Insert data into the **Students** table.

```
INSERT INTO Students (student_id, first_name, last_name, birth_date, gender, course)  
VALUES (1, 'John', 'Doe', '2000-05-15', 'M', 'Computer Science');
```

```
INSERT INTO Students (student_id, first_name, last_name, birth_date, gender, course)  
VALUES (2, 'Jane', 'Smith', '2001-09-22', 'F', 'Electrical Engineering');
```

```
INSERT INTO Students (student_id, first_name, last_name, birth_date, gender, course)  
VALUES (3, 'Sam', 'Brown', '1999-11-10', 'M', 'Mechanical Engineering');
```

## 3. SELECT

Select all students from the **Students** table.

```
SELECT * FROM Students;
```

Select specific columns (e.g., first and last names):

```
SELECT first_name, last_name FROM Students;
```

Select students of a particular course:

```
SELECT * FROM Students WHERE course = 'Computer Science';
```

#### 4. ALTER TABLE

Add a new column to the **Students** table for storing the student's email address.

```
ALTER TABLE Students  
ADD email VARCHAR(100);
```

Change the **gender** column data type from **CHAR(1)** to **VARCHAR(10)**:

```
ALTER TABLE Students  
MODIFY gender VARCHAR(10);
```

#### 5. UPDATE

Update a student's course and email.

```
UPDATE Students  
SET course = 'Data Science', email = 'john.doe@example.com'  
WHERE student_id = 1;
```

#### 6. DROP TABLE

Drop the **Students** table completely.

```
DROP TABLE Students;
```

#### 7. DELETE

Delete a specific student from the table by **student\_id**.

```
DELETE FROM Students WHERE student_id = 2;
```

#### 8. TRUNCATE TABLE

Remove all records from the **Students** table but keep the structure intact.

```
TRUNCATE TABLE Students;
```

This series of queries shows how to create, manipulate, and manage a simple student database.