Practice Set 3

~~CREATE TABLE Library (BookID, Title, Author, Publisher, Genre, PublishedYear~~

```
CREATE TABLE Library(
 BOOKID INT AUTO_INCREMENT PRIMARY_KEY,
 Title VARCHAR(50),
 Author VARCHAR(50),
 Publisher VARCHAR(50),
 Genre VARCHAR(50),
 PublishedYear INT,
 ISBN VARCHAR(20) UNIQUE,
 Pages INT,
 CopiesAvailable INT,
 Price DECIMAL
 );
```

```
INSERT INTO Library (BookID, Title,
Author, Publisher, Genre, PublishedYear,
ISBN, Pages, CopiesAvailable, Price) VALUES
(1, 'To Kill a Mockingbird', 'Harper Lee',
'J.B. Lippincott', 'fiction', 1960, '978-0061120084',
324, 5, 15.99)
(2, '1984', 'George Orwell', 'Harvill Secker',
'Dystopian', 1949, '978-0451524935', 328,
2, 9.99),
(3, 'The Great Gatsby', 'f. Scott fitzgerald',
'Scribner', 'fiction', 1925, '978-0743273565',
180, 3, 10.99);
```

③ ①

```
UPDATE Library
SET Price = 11.99
WHERE ISBN = '978-0451524935'
AND Genre = 'Dystopian'
AND PublishedYear < 1950;
```

②.

```
UPDATE Library
SET CopiesAvailable = 10
WHERE Genre = 'fiction'
AND PublishedYear > 1950;
```

④.

```
UPDATE Library
SET Price = Price - 0.05 * Price
WHERE Genre = 'fiction'
AND Pages > 300;
```

⑥.

```
UPDATE Library
SET Pages = 350
WHERE CopiesAvailable > 4 AND
      Price < 14;
```

⑤.

```
UPDATE Library
SET price = price + 0.1 * price
WHERE Genre = 'fantasy' AND
      PublishedYear < 1950 AND
      Pages < 300;
```

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6.

```
UPDATE Library
SET CopiesAvailable = 0
WHERE Price > 12 AND
      Genre = 'fiction' OR Genre = 'Dystopian'
```

7.

```
UPDATE Library
SET PublishedYear = 2020
WHERE Author LIKE '%.Tolkien%.'
      ~~Price < 15 AND Price > 10~~
      Price BETWEEN 10 AND 15 ;
```

8.

```
UPDATE Library
SET Price = 8.99
WHERE Author like 'George Orwell'
      AND Pages > 300 ;
```

9.

```
UPDATE Library
SET Price = Price * 0.85
WHERE Genre = 'fiction' AND
      PublishedYear < 1950 AND
      CopiesAvailable < 5 ;
```

10. Update Library
SET price = 17.99
WHERE Title = 'To kill a Mockingbird'
AND PublishedYear = 1960 AND
CopiesAvailable > 4 ;

(4).

(5).

(6).

(7).

(8).

(4). DELETE Queries.

(1)
DELETE FROM Library
WHERE ISBN IN ('978-0451524935',
'978-6618968633') AND
Genre = 'Dystopian' AND
CopiesAvailable > 2 ;

(2)
DELETE FROM Library
WHERE PublishedYear < 1950 AND
price < 10 ;

(3). DELETE FROM Library
WHERE Genre = 'fiction' AND
CopiesAvailable = 3 AND
PublishedYear < 1960 ;

④. DELETE FROM Library
WHERE pages < 200 AND
PublishedYear >1920 AND
PublishedYear <1960;

⑤. DELETE FROM Library
WHERE Author = 'Harper Lee' AND
Price < 12;

⑥. DELETE FROM Library
WHERE CopiesAvailable = 0 AND
Price >15;

⑦. DELETE FROM Library
WHERE ISBN = '978-0743273565' AND
Genre = 'fiction' and
PublishedYear < 1950;

⑧. DELETE FROM Library
WHERE PublishedYear >2000 AND
(Price Between 10 AND 15 OR
Price >15);

(5). SELECT Queries

(1) SELECT * FROM Library
WHERE Genre = 'fiction' AND
Pages > 200 AND
Price Between 10 AND 15 ;

(2).
SELECT * FROM Library
WHERE Pages > 300 AND
Price > 12 AND
Genre != 'fantasy' ;

(3). SELECT * FROM Library
WHERE PublishedYear Between 1925 AND 1957
AND Price < 13 AND
Copies > 3 ;

(4). SELECT * FROM Library
WHERE PublishedYear > 1950 AND
Price > 10 AND
(Author = 'Harper Lee' OR Author = 'Geo
Orwell

(5).
```
SELECT * FROM Library
WHERE Author = 'J.R.R. Tolkien' AND
      copies Available > 5 AND
      Price Between 12 AND 15 ;
```

(6).
```
SELECT * FROM Library
WHERE (Genre = 'Dystopian' OR Genre = 'fantasy')
AND Pages > 300
ORDER BY Price DESC
LIMIT 1;
```

(7).
```
SELECT * FROM Library
WHERE Author Like 'Y.Tolkien Y.'
      Published year <= 1940
      Copies Available Between 4 and 6 ;
```

(8).
```
SELECT * FROM Library
WHERE Genre = 'fiction' AND
      Pages > 200 AND
      (Price between 10 AND 20) AND
      (Copies Available BETWEEN 2 AND 5);
```

(9).
```
SELECT * FROM Library
WHERE Published year < 1950 AND
      Price < 15 AND Copies Available < 3 ;
```

Practice SET -1

(1). Schema

```
CREATE TABLE students (
    studentID INT Primary KEY AUTO-INCREMENT,
    firstName VARCHAR(50) NOT NULL,
    LastName VARCHAR(50) NOT NULL,
    Age INT CHECK (Age >= 16),
    Enrollment_Date DATE DEFAULT (CURRENT_DATE),
    Major VARCHAR(100)
);
```

(2).
```
INSERT INTO Students (studentId, firstName,
LastName, Age, EnrollmentDate, Major)
VALUES
(1, 'Alice', 'Solonson', 18, '2023-09-01',
('Computer Science'),
(2, 'Bob', 'Smith', "20", '2022-0C-15',
'Mathematics'),
(3, 'Charlie', 'Brown', 19, '2021-08-20',
'Physics'),
(4, 'Daisy', 'Carter', 21, '2023-01-10',
'Biology');
```

② Update

① Update Students
SET Major = 'Data science'
WHERE StudentId = 1 ;

② Update students
SET age = age + 1
WHERE Enrollment_Date < '2023-01-01' ;

③ UPDATE students
SET LastName = 'Cooper'
WHERE firstName = 'Daisy' ;

④
UPDATE students
SET Major = 'Undeclared'
WHERE age < 20 ;

⑤ UPDATE students
SET EnrollmentDate = '2024-01-01'
WHERE studentID = 5 ;

⑥ UPDATE students
SET Major = 'Physics'
WHERE Major = 'Biology' ;

*.

```
UPDATE Students
SET Age = 23
WHERE firstName = 'Charlie';
```

(8).

```
UPDATE Students
SET LastName = 'Williams'
WHERE Major = 'Mathematics'
```

(9).

```
UPDAE Students
SET FirstNAME = 'Alex'
WHERE Age = ( SELECT MIN(Age) FROM Student
```

(10).

```
UPDATE Students
SET Age = NULL
WHERE Major = 'Undeclared'
```

Question 4

(1).

```
DELETE FROM student
where studentID = 3;
```

③. DELETE FROM Students
WHERE Major = 'Undeclared';

④. DELETE FROM Students
WHERE EnrollmentDate > '2023-01-01';

⑤. DELETE FROM Students
WHERE age > 21;

⑥. DELETE FROM Students
WHERE firstName = 'Ethan' AND
LastName = 'Taylor';

⑦. DELETE FROM Students
WHERE Age = NULL;

⑧. DELETE FROM Students
WHERE LastName LIKE 'C%';

⑨. DELETE FROM Students
WHERE EnrollmentDate > '2022-01-01';

⑩. DELETE FROM Students
WHERE Major = 'Physics';

10. DELETE FROM students;