SQL Exercises

Setup:

1. Go to: SQL OnLine IDE (sqliteonline.com)
2. Connect to MS SQL
3. Run the following SQL:

```
CREATE TABLE Users (
    UserId INT PRIMARY KEY IDENTITY(1,1),
    UserName NVARCHAR(100) NOT NULL,
    Email NVARCHAR(100) NOT NULL,
    Location NVARCHAR(100),
    HasSignedIn BIT NOT NULL
);

INSERT INTO Users (UserName, Email, Location, HasSignedIn) VALUES
('Alice Johnson', 'alice.johnson@example.com', 'New York', 1),
('Bob Smith', 'chuck.brown@example.com', 'Los Angeles', 0),
('Chuck Brown', 'chuck.brown@example.com', 'Chicago', 1),
('Diana Price', 'diana.price@example.com', 'New York', 1),
('Edward Clark', 'edward.clark@example.com', 'San Francisco', 0);
```

This will create a dummy database.

Tasks:

1. Select all users

SELECT UserName FROM Users

2. Count all users

SELECT COUNT(UserName) FROM Users

3. Find all users with the location ‘New York’

SELECT UserName FROM Users WHERE location='New York'

4. Find all users who have signed in

SELECT UserName FROM Users WHERE hassignedin='1'

5. Update the location of Bob Smith to Miami

UPDATE Users SET location='Miami' WHERE username='Bob Smith';

6. Delete Chuck Brown from DB

DELETE FROM Users WHERE username='Chuck Brown';

7. Order all users by their UserName

SELECT * FROM Users ORDER BY username DESC

8. Find duplicate emails

SELECT email, COUNT(*) from Users group by email HAVING COUNT(*) > 1

9. Select only UserId and UserName of all users

```
SELECT userid, username FROM Users
```

10. Add a new user into DB

```
INSERT INTO Users (UserName, Email, Location, HasSignedIn) VALUES  ('Frank Jones', 'frank.jones@example.com', 'Austin', 0)
```