**Assignment - 3 (SQL | Subqueries and DDL-DML Commands)**

**Single-Row Subqueries:**

**1.**

SELECT TrackID, Name, Milliseconds

FROM tracks

WHERE Milliseconds =

(SELECT MAX(Milliseconds)

FROM tracks);

**2.**

SELECT TrackID, Name, Milliseconds

FROM tracks

WHERE Milliseconds =

(SELECT MIN(Milliseconds)

FROM tracks);

**3.**

SELECT TrackId, Name, Bytes, (SELECT printf('%.2f', avg(Bytes))

FROM tracks) as Avg\_of\_Bytes FROM tracks

WHERE Bytes >

(SELECT avg(Bytes) FROM tracks) ORDER by Bytes DESC;

**Multiple-Row Subqueries:**

**1.**

SELECT CustomerId, FirstName, LastName

FROM customers

WHERE SupportRepID IN

(SELECT EmployeeID

FROM employees

WHERE LastName = 'Park'

OR LastName = 'Peacock');

**2.**

SELECT

customers.CustomerId,

customers.FirstName,

customers.LastName

FROM customers

JOIN employees

ON customers.SupportRepID = employees.EmployeeID

WHERE employees.LastName = 'Park'

OR employees.LastName = 'Peacock';

**DDL (CREATE, ALTER, DELETE) and DML (SELECT, INSERT, UPDATE, DELETE) Statements**

**1.**

DROP TABLE IF EXISTS courses;

CREATE TABLE courses (

CourseId INT PRIMARY KEY,

CourseName TEXT NOT NULL,

EmployeeId INT,

CoursePrice INT,

FOREIGN KEY (EmployeeId)

REFERENCES employees (EmployeeId)

);

**2.**

INSERT INTO courses (CourseId, CourseName, EmployeeId, CoursePrice)

VALUES (1, 'Calculus I', 1, 600),

(2, 'Calculus II', 2, 600),

(3, 'Geometry', 3, 600),

(4, 'Physics', 3, 890),

(5, 'Chemistry', 3, 890),

(6, 'Design', 4, 750),

(7, 'Statistics', 5, 600),

(8, 'Statics', 6, 600),

(9, 'Dynamics', 7, 600),

(10, ' Thermodynamics', 8, 600);

**3.**

DELETE FROM courses

WHERE CourseId = 10;

**4.**

ALTER TABLE courses

ADD StartDate DATE NOT NULL DEFAULT '2020-10-10';

**5.**

ALTER TABLE courses

DROP COLUMN CoursePrice;

**6.**

DROP TABLE courses;