Lab 4

Code:

```
CREATE TABLE fruits (
   fruit_id INT PRIMARY KEY,
   F_name VARCHAR(50),
   color VARCHAR(20),
   taste VARCHAR(50),
   season VARCHAR(20)
);
select * from fruits;
INSERT INTO fruits (fruit_id, F_name, color, taste, season)
VALUES (1, 'Apple', 'Red', 'Sweet', 'Autumn'),
      (2, 'Banana', 'Yellow', 'Sweet', 'All year round'),
      (3, 'Orange', 'Orange', 'Sweet', 'Winter'),
        (4, 'Strawberry', 'Red', 'Sweet', 'Spring'),
      (5, 'Blueberry', 'Blue', 'Sweet', 'Summer'),
      (6, 'Pineapple', 'Yellow', 'Sweet and tangy', 'All year round'),
      (7, 'Mango', 'Yellow', 'Sweet', 'Summer');



 CREATE TABLE nutrients (
```

```
    nutrient_id INT PRIMARY KEY,
    N_name VARCHAR(50),
    unit VARCHAR(20)
);
INSERT INTO nutrients (nutrient_id, N_name, unit)
      VALUES (1, 'Vitamin C', 'mg'),
            (2, 'Potassium', 'mg'),
            (3, 'Fiber', 'g'),
            (4, 'Vitamin A', 'IU'),
      (5, 'Calcium', 'mg'),
      (6, 'Iron', 'mg');
select *from nutrients;

CREATE TABLE fruit_nutrients (
    fruit_id INT,
    nutrient_id INT,
    amount DECIMAL(10,2),
    FOREIGN KEY (fruit_id) REFERENCES fruits(fruit_id),
    FOREIGN KEY (nutrient_id) REFERENCES nutrients(nutrient_id)
);
INSERT INTO fruit_nutrients (fruit_id, nutrient_id, amount)
            VALUES (1, 1, 12),
            (1, 2, 195),
```

```
        (1, 3, 4),
        (2, 1, 10),
        (2, 2, 420),
        (2, 3, 3),
        (3, 1, 60),
        (3, 2, 235),
         (3, 3, 4);
select *from fruit_nutrients;

--1
INSERT INTO fruits (fruit_id, F_name, color, taste, season)
VALUES (8, 'Avocado', 'Green', 'Sweet and creamy', 'Fall');

--2
SELECT * FROM fruits
WHERE F_name LIKE 'A%';

--3
SELECT f.F_name AS Fruit_Name, fn.amount AS Vitamin_C_Amount, f.taste
FROM fruits f
JOIN fruit_nutrients fn ON f.fruit_id = fn.fruit_id
WHERE fn.nutrient_id = 1;
```

```
--4
UPDATE fruits
SET taste = 'Tart'
WHERE fruit_id = 5;

--5
DELETE FROM fruit_nutrients
WHERE fruit_id = 3;

--6
SELECT AVG(amount) AS Avg_Vitamin_C
FROM fruit_nutrients
WHERE nutrient_id = 1;

--7
SELECT f.F_name, fn.amount
FROM fruits f
JOIN fruit_nutrients fn ON f.fruit_id = fn.fruit_id
WHERE f.color = 'Red' AND f.taste = 'Sweet'
ORDER BY fn.amount DESC;
```

Results:

Fruit_nutrients

fruit_id	nutrient_id	amount
1	1	12
1	2	195
1	3	4
2	1	10
2	2	420
2	3	3

Fruits

fruit_id	F_name	color	taste	sea
1	Apple	Red	Sweet	Aut
2	Banana	Yellow	Sweet	All y rour
3	Orange	Orange	Sweet	Win
4	Strawberry	Red	Sweet	Spri
5	Blueberry	Blue	Tart	Sum
6	Pineapple	Yellow	Sweet and tangy	All y rour
7	Mango	Yellow	Sweet	Sum
8	Avocado	Green	Sweet and creamy	Fall

Nutrients

nutrient_id	N_name	unit
1	Vitamin C	mg
2	Potassium	mg
3	Fiber	g
4	Vitamin A	IU
5	Calcium	mg
6	Iron	mg

fruit_id	nutrient_id	amount
1	1	12
1	2	195
1	3	4
2	1	10
2	2	420

fruit_id	F_name	color	taste	season
1	Apple	Red	Sweet	Autumn
8	Avocado	Green	Sweet and creamy	Fall

nutrient_id	N_name	unit
1	Vitamin C	mg
2	Potassium	mg
3	Fiber	g
4	Vitamin A	IU
5	Calcium	mg

F_name	amount
Apple	195
Apple	12
Apple	4

Avg_Vitamin_C
11

Fruit_Name	Vitamin_C_Amount	taste
Apple	12	Sweet
Banana	10	Sweet
Orange	60	Sweet