BASICS OF SQL

1)Create a table students(id, name, marks) and insert 2 rows.

```
CREATE TABLE students (
   id INT,
   name VARCHAR(50),
   marks INT
);

INSERT INTO students VALUES (1, 'Harini', 72);
INSERT INTO students VALUES (2, 'Janani', 85);
SELECT * FROM students
```

id	name	marks
1	Harini	72
2	Janani	85

2) Create a table employees(emp_id, emp_name, salary) and insert 2 sample rows.

```
CREATE TABLE employees (
   emp_id INT,
   emp_name VARCHAR(50),
   salary INT
);

INSERT INTO employees VALUES (111, 'KAVIN', 40000);
INSERT INTO employees VALUES (112, 'KANI', 60000);
SELECT * FROM employees
```

emp_id	emp_name	salary
111	KAVIN	40000
112	KANI	60000

3)Create a table products(product_id, product_name, price) and insert 3 products.

```
CREATE TABLE products (
    productid INT,
    productname VARCHAR(50),
    price INT
);

INSERT INTO products VALUES (1, 'PENCIL', 10);
INSERT INTO products VALUES (2, 'PEN', 50);
INSERT INTO products VALUES (3, 'SCALE', 115);
SELECT * FROM products
```

productid	productname	price
1	PENCIL	10
2	PEN	50
3	SCALE	115

4)Update an employee's salary by 10% in the employees table.

```
UPDATE employees
SET salary = salary + (salary * 0.1)
WHERE emp_id IS NOT NULL;
SELECT * FROM employees
```

emp_id	emp_name	salary
111	KAVIN	44000
112	KANI	66000

5) Delete a product where the price is > 500.

```
1 INSERT INTO products VALUES (1, 'BAG', 1000);
2 INSERT INTO products VALUES (2, 'SHOES', 700);
3 INSERT INTO products VALUES (3, 'PENCILBOX', 115);
4 SELECT * FROM products
5
```

productid	productname	price
1	PENCIL	10
2	PEN	50
3	SCALE	115
1	BAG	1000
2	SHOES	700
3	PENCILBOX	115

DELETE FROM products
WHERE price > 500;
SELECT * FROM products

productid	productname	price
1	PENCIL	10
2	PEN	50
3	SCALE	115
3	PENCILBOX	115

6) Select all students with marks > 80.

```
SELECT id,name, marks FROM students
WHERE marks > 80;
```

id	name	marks
2	Janani	85

7) Use a recursive CTE to simulate a WHILE loop to increase salary by 1000 until it reaches 10,000.

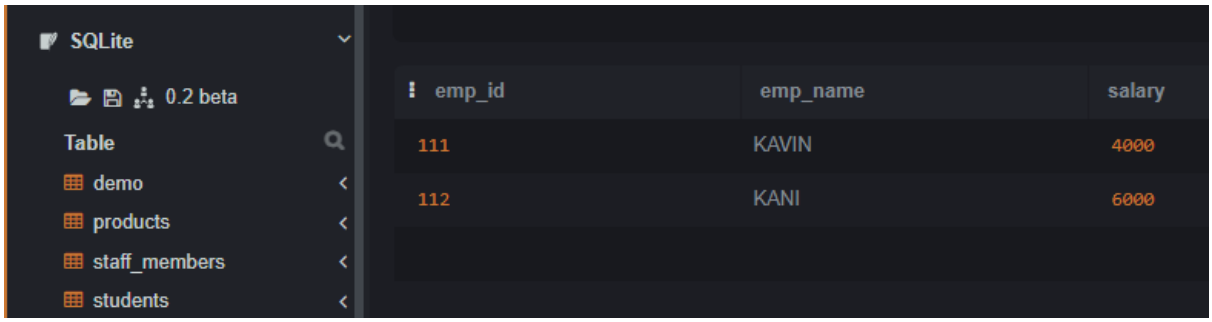
```
1 INSERT INTO employees VALUES (111, 'KAVIN', 4000);
2 INSERT INTO employees VALUES (112, 'KANI', 6000);
3 SELECT * FROM employees
4
```

emp_id	emp_name	salary
111	KAVIN	4000
112	KANI	6000

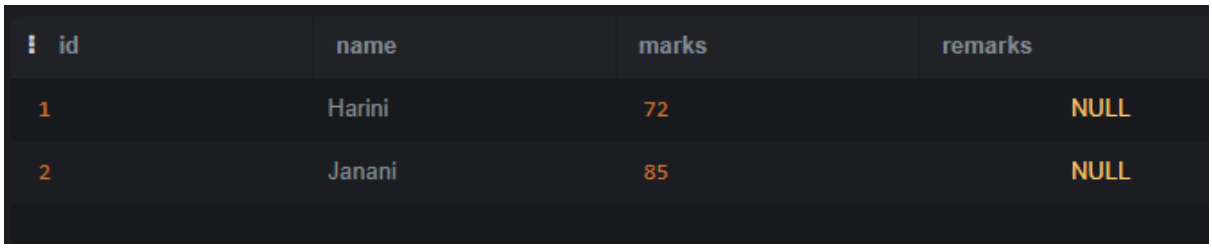
```
WITH RECURSIVE inc(emp_id, emp_name, salary) AS (
   SELECT emp_id, emp_name, salary FROM employees
   UNION ALL
   SELECT emp_id, emp_name, salary + 1000 FROM inc
   WHERE salary < 10000
)
SELECT * FROM inc
WHERE salary >= 10000;
```

emp_id	emp_name	salary
112	KANI	10000
111	KAVIN	10000

8) Rename the table employees to staff_members
ALTER TABLE employees RENAME TO staff_members;
SELECT * FROM staff_members



9) Add a new column remarks to the students table.
ALTER TABLE students ADD remarks VARCHAR(100);
SELECT * FROM students



10) Create a backup table students_backup with all rows from students.
CREATE TABLE students_backup AS
SELECT * FROM students;
SELECT * FROM students_backup;