**SQL(Structural Query Language)**

1. **Creating table**

CREATE TABLE employees (

emp\_id INT PRIMARY KEY,

name VARCHAR(100) NOT NULL,

department VARCHAR(50),

salary DOUBLE,

join\_date DATE

);

**Insert query**

INSERT INTO employees (emp\_id, name, department, salary, join\_date) VALUES

(101, 'John Doe', 'HR', 45000, '2021-06-15'),

(102, 'Jane Smith', 'IT', 75000, '2020-01-10'),

(103, 'Alice Johnson', 'Finance', 60000, '2019-08-23'),

(104, 'Bob Brown', 'IT', 80000, '2022-03-01'),

(105, 'Eve Davis', 'Marketing', 55000, '2021-11-05');

**Select query**

SELECT \* FROM employees;

SELECT name, department FROM employees;

SELECT \* FROM employees

WHERE department = 'IT';

**AND, IN BETWEEN & LIKE**

SELECT \* FROM employees

WHERE department = 'IT' AND salary > 75000;

SELECT \* FROM employees

WHERE department IN ('IT', 'Finance');

SELECT \* FROM employees

WHERE salary BETWEEN 50000 AND 70000;

SELECT \* FROM employees

WHERE name LIKE 'J%'; -- Names starting with J

**CLAUSE -ORDER BY, WHERE, HAVING**

SELECT \* FROM employees

ORDER BY salary DESC;

**UPDATE QUERY**

UPDATE employees

SET salary = 82000

WHERE emp\_id = 104;

DELETE FROM employees

WHERE emp\_id = 105;

SELECT department, AVG(salary) AS avg\_salary

FROM employees

GROUP BY department;

SELECT department, COUNT(\*) AS emp\_count

FROM employees

GROUP BY department

HAVING COUNT(\*) > 1;