CREATE TABLE employees (

emp\_id INT PRIMARY KEY,

emp\_name VARCHAR(50),

dept\_id INT

);

INSERT INTO employees VALUES (1, 'John', 1);

INSERT INTO employees VALUES (2, 'Alice', 1);

INSERT INTO employees VALUES (3, 'Bob', 2);

INSERT INTO employees VALUES (4, 'Carol', 3);

CREATE TABLE departments (

dept\_id INT PRIMARY KEY,

dept\_name VARCHAR(50)

);

INSERT INTO departments VALUES (1, 'HR');

INSERT INTO departments VALUES (2, 'Finance');

INSERT INTO departments VALUES (3, 'IT');

CREATE TABLE projects (

project\_id INT PRIMARY KEY,

project\_name VARCHAR(50)

);

INSERT INTO projects VALUES (101, 'Project A');

INSERT INTO projects VALUES (102, 'Project B');

INSERT INTO projects VALUES (103, 'Project C');

INSERT INTO projects VALUES (104, 'Project D');

CREATE TABLE employee\_projects (

emp\_id INT,

project\_id INT

);

INSERT INTO employee\_projects VALUES (1, 101);

INSERT INTO employee\_projects VALUES (2, 101);

INSERT INTO employee\_projects VALUES (2, 102);

INSERT INTO employee\_projects VALUES (3, 103);

INSERT INTO employee\_projects VALUES (4, 102);

**Problem 1 - INNER JOIN: Retrieve the names of employees and their corresponding department names.**

**Problem 2 - LEFT JOIN: Retrieve the names of all employees along with the project they are working on, if any.**

**Problem 3 - RIGHT JOIN: Retrieve the names of all projects along with the employees assigned to them, if any.**

**Problem 4 - FULL OUTER JOIN: Retrieve all employees and their assigned projects, along with department names.**