**MYSQL ASSIGNMENT 5**

use assignment3;

Create table Employees(

emp\_id int,

emp\_name varchar(50),

department\_id int);

insert into Employees(emp\_id, emp\_name, department\_id)

values(1, "Alice", 10),

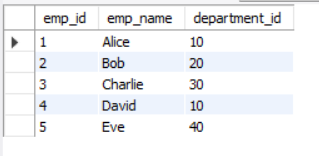
(2, "Bob", 20),

(3, "Charlie", 30),

(4, "David", 10),

(5, "Eve", 40);

select \* from Employees;



use assignment3;

create table Departments(

department\_id int,

department\_name varchar(50));

insert into Departments(Department\_id, Department\_name)

Values(10, "HR"),

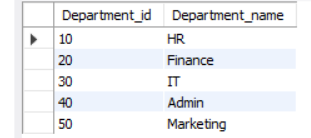
(20, "Finance"),

(30, "IT"),

(40, "Admin"),

(50, "Marketing");

select \* from Departments;



use assignment3;

Create table Projects(

project\_id int,

emp\_id int,

project\_name varchar(50));

insert into Projects(project\_id, emp\_id, project\_name)

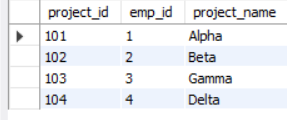
values(101, 1 , "Alpha"),

(102, 2, "Beta"),

(103, 3, "Gamma"),

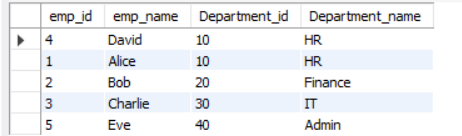
(104, 4, "Delta");

select \* from Projects;



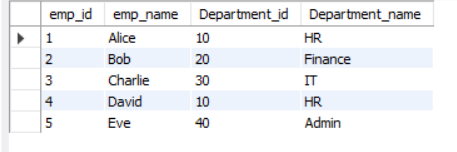
#1.Write a query to get Employee and Department details using join.

SELECT Employees.emp\_id, Employees.emp\_name, Departments.Department\_id, Departments.Department\_name FROM Employees INNER JOIN Departments ON Employees.Department\_id = Departments.Department\_id;



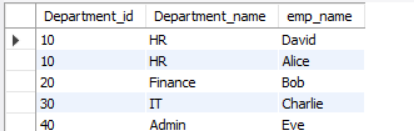
#2.Write a query to retrieve all employees with their departments, even if the department is missing.

select Employees.emp\_id, Employees.emp\_name, Departments.Department\_id, Departments.Department\_name from Employees left JOIN Departments on Employees.department\_id = Departments.Department\_id ;



#3.Write a query to get department details even if there are no employees in that department.

select Departments.Department\_id, Departments.Department\_name, Employees.emp\_name from Employees INNER JOIN Departments on Employees.department\_id = Departments.Department\_id;



#4.Write a query to get all employees and departments, whether matched or not.

SELECT e.emp\_id,

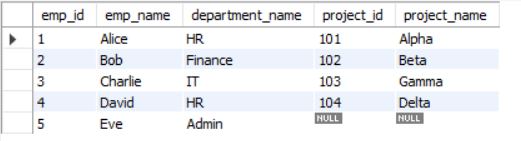
e.emp\_name,

d.department\_name,

p.project\_id,

p.project\_name

FROM Employees e LEFT JOIN Departments d ON e.department\_id = d.department\_id LEFT JOIN Projects p ON e.emp\_id = p.emp\_id;



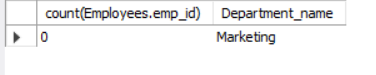
#6.Find employees who are not assigned to any projects.

SELECT Employees.\* FROM Employees LEFT JOIN Projects ON Employees.emp\_id = Projects.emp\_id WHERE Projects.project\_id IS NULL;



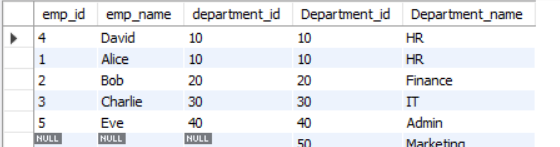
#7.Find departments with no employees using a RIGHT JOIN.

select count(Employees.emp\_id), Departments.Department\_name from Employees right join Departments on Employees.Department\_id = Departments.department\_id group by Departments.Department\_name having count(Employees.emp\_id) = 0;



#8.Write a query to get Employee and Department details using join with aliases.

select \* from Employees right join Departments on Employees.Department\_id = Departments.department\_id;



#9.Write a query to find employees in the same department as other employees.

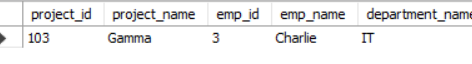
SELECT p.project\_id,

p.project\_name,

e.emp\_id,

e.emp\_name,

d.department\_name FROM Projects p JOIN Employees e ON p.emp\_id = e.emp\_id JOIN Departments d ON e.department\_id = d.department\_id WHERE d.department\_name = 'IT';



#10.Write a query to find projects managed by employees in the 'IT' department.

SELECT p.project\_id,

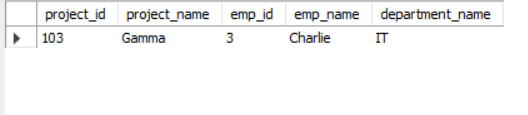
p.project\_name,

e.emp\_id,

e.emp\_name,

d.department\_name

FROM Projects p JOIN Employees e ON p.emp\_id = e.emp\_id JOIN Departments d ON e.department\_id = d.department\_id WHERE d.department\_name = 'IT';



#11.Write a query to show employees and their project information (even if not assigned to a project).

SELECT e.emp\_id,

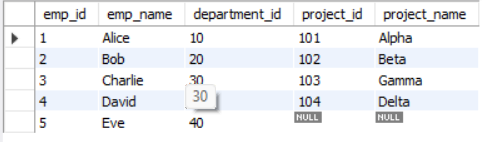
e.emp\_name,

e.department\_id,

p.project\_id,

p.project\_name

FROM Employees e LEFT JOIN Projects p ON e.emp\_id = p.emp\_id;



#12.Find employees who work in departments with names starting with 'A'.

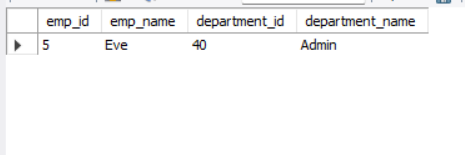
SELECT e.emp\_id,

e.emp\_name,

e.department\_id,

d.department\_name

FROM Employees e JOIN Departments d ON e.department\_id = d.department\_id WHERE d.department\_name LIKE 'A%';



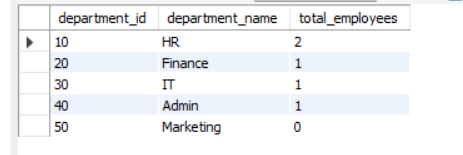
#13.Find the total number of employees in each department using GROUP BY and JOIN.

SELECT d.department\_id,

d.department\_name,

COUNT(e.emp\_id) AS total\_employees

FROM Departments d LEFT JOIN Employees e ON d.department\_id = e.department\_id GROUP BY d.department\_id, d.department\_name;



#14.Get the list of departments with more than one employee.

SELECT d.department\_id,

d.department\_name,

COUNT(e.emp\_id) AS total\_employees

FROM Departments d JOIN Employees e ON d.department\_id = e.department\_id GROUP BY d.department\_id, d.department\_name HAVING COUNT(e.emp\_id) > 1;

