DAY 10 – SQL JOINS
25 PRACTICE QUERIES

1. Display employee names with their department names.
SELECT e.emp_name, d.dept_name FROM employees e INNER JOIN departments d ON e.dept_id = d.dept_id;

2. Show all employees working in IT department.
SELECT e.emp_name FROM employees e INNER JOIN departments d ON e.dept_id = d.dept_id WHERE d.dept_name='IT';

3. Display employee name, salary and department.
SELECT e.emp_name, e.salary, d.dept_name FROM employees e INNER JOIN departments d ON e.dept_id = d.dept_id;

4. List employees working in HR department.
SELECT e.emp_name FROM employees e INNER JOIN departments d ON e.dept_id = d.dept_id WHERE d.dept_name='HR';

5. Count employees in each department.
SELECT d.dept_name, COUNT(e.emp_id) FROM employees e INNER JOIN departments d ON e.dept_id = d.dept_id GROUP BY d.dept_name;

6. Employees earning more than 55000 with department.
SELECT e.emp_name, d.dept_name FROM employees e INNER JOIN departments d ON e.dept_id = d.dept_id WHERE e.salary>55000;

7. List distinct departments having employees.
SELECT DISTINCT d.dept_name FROM employees e INNER JOIN departments d ON e.dept_id = d.dept_id;

8. Count employees with salary above 50000 by department.
SELECT d.dept_name, COUNT(*) FROM employees e INNER JOIN departments d ON e.dept_id = d.dept_id WHERE e.salary>50000 GROUP BY d.dept_name;

9. Show all employees with their departments (LEFT JOIN).
SELECT e.emp_name, d.dept_name FROM employees e LEFT JOIN departments d ON e.dept_id = d.dept_id;

10. List employees without department.
SELECT e.emp_name FROM employees e LEFT JOIN departments d ON e.dept_id = d.dept_id WHERE d.dept_id IS NULL;

11. Show employees and department (replace NULL).
SELECT e.emp_name, IFNULL(d.dept_name,'No Dept') FROM employees e LEFT JOIN departments d ON e.dept_id = d.dept_id;

12. Count employees per department including zero.
SELECT d.dept_name, COUNT(e.emp_id) FROM departments d LEFT JOIN employees e ON d.dept_id = e.dept_id GROUP BY d.dept_name;

13. Show employee salary with department.
SELECT e.emp_name, e.salary, d.dept_name FROM employees e LEFT JOIN departments d ON e.dept_id = d.dept_id;

14. Find departments without employees.
SELECT d.dept_name FROM departments d LEFT JOIN employees e ON d.dept_id = e.dept_id WHERE e.emp_id IS NULL;

15. Show all departments with employees (RIGHT JOIN).
SELECT e.emp_name, d.dept_name FROM employees e RIGHT JOIN departments d ON e.dept_id = d.dept_id;

16. Find departments with no employees (RIGHT JOIN).
SELECT d.dept_name FROM employees e RIGHT JOIN departments d ON e.dept_id = d.dept_id WHERE e.emp_id IS NULL;

17. Department-wise employee count using RIGHT JOIN.
SELECT d.dept_name, COUNT(e.emp_id) FROM employees e RIGHT JOIN departments d ON e.dept_id = d.dept_id GROUP BY d.dept_name;

18. Display all department names.
SELECT d.dept_name FROM employees e RIGHT JOIN departments d ON e.dept_id = d.dept_id;

19. List employees with departments using RIGHT JOIN.
SELECT e.emp_name, d.dept_name FROM employees e RIGHT JOIN departments d ON e.dept_id = d.dept_id;

20. FULL JOIN using UNION.
SELECT e.emp_name, d.dept_name FROM employees e LEFT JOIN departments d ON e.dept_id=d.dept_id UNION SELECT e.emp_name, d.dept_name FROM employees e RIGHT JOIN departments d ON e.dept_id=d.dept_id;

21. FULL JOIN with employee id.
SELECT e.emp_id, e.emp_name, d.dept_name FROM employees e LEFT JOIN departments d ON e.dept_id=d.dept_id UNION SELECT e.emp_id, e.emp_name, d.dept_name FROM employees e RIGHT JOIN departments d ON e.dept_id=d.dept_id;

22. Employees without department and departments without employees.
SELECT e.emp_name, d.dept_name FROM employees e LEFT JOIN departments d ON e.dept_id=d.dept_id WHERE d.dept_id IS NULL UNION SELECT e.emp_name, d.dept_name FROM employees e RIGHT JOIN departments d ON e.dept_id=d.dept_id WHERE e.emp_id IS NULL;

23. Count rows after FULL JOIN.
SELECT COUNT(*) FROM (SELECT e.emp_id FROM employees e LEFT JOIN departments d ON e.dept_id=d.dept_id UNION SELECT e.emp_id FROM employees e RIGHT JOIN departments d ON e.dept_id=d.dept_id) t;

24. FULL JOIN with salary.
SELECT e.emp_name, e.salary, d.dept_name FROM employees e LEFT JOIN departments d ON e.dept_id=d.dept_id UNION SELECT e.emp_name, e.salary, d.dept_name FROM employees e RIGHT JOIN departments d ON e.dept_id=d.dept_id;

25. Complete employee-department mapping.
SELECT e.emp_id, e.emp_name, d.dept_id, d.dept_name FROM employees e LEFT JOIN departments d ON e.dept_id=d.dept_id UNION SELECT e.emp_id, e.emp_name, d.dept_id, d.dept_name FROM employees e RIGHT JOIN departments d ON e.dept_id=d.dept_id;