

This query retrieves all rows in the EMPLOYEES table, even if there is no match in the DEPARTMENTS table. It also retrieves all rows in the DEPARTMENTS table, even if there is no match in the EMPLOYEES table.

Find the Solution for the following:

1. Write a query to display the last name, department number, and department name for all employees.

```
SELECT e.last_name, e.department_id, d.department_name
FROM employees e JOIN departments d ON e.department_id
= d.department_id;
```

2. Create a unique listing of all jobs that are in department 80. Include the location of the department in the output.

```
SELECT DISTINCT e.job_id, l.location_id, l.city FROM employees
e JOIN departments d ON e.department_id = d.department_id
JOIN locations l ON d.location_id = l.location_id WHERE
e.commission_pct IS NOT NULL;
```

3. Write a query to display the employee last name, department name, location ID, and city of all employees who earn a commission

```
SELECT e.last_name, d.department_name, l.location_id, l.city FROM
employees e JOIN departments d ON e.department_id = d.department
_id JOIN locations l ON d.location_id = l.location_id WHERE
commission_pct IS NOT NULL;
```

4. Display the employee last name and department name for all employees who have an a(lowercase) in their last names. P

```
SELECT e.last_name, d.department_name FROM employees e JOIN
departments d ON e.department_id = d.department_id WHERE e.last_name
LIKE 'a%';
```

5. Write a query to display the last name, job, department number, and department name for all employees who work in Toronto.

```
SELECT e.last_name, e.job, e.department_id, d.department_name
FROM employees e JOIN departments d ON e.department_id =
d.department_id JOIN locations l ON d.location_id = l.location_id
WHERE l.city = 'Toronto';
```

6. Display the employee last name and employee number along with their manager's last name and manager number. Label the columns Employee, Emp#, Manager, and Mgr#, Respectively

```
SELECT e.last_name AS Employee, e.employee_id AS Emp#,
m.last_name AS Manager, m.employee_id AS Mgr#
FROM employees e LEFT JOIN employees m ON e.manager_id =
m.employee_id;
```

7. Modify lab4_6.sql to display all employees including King, who has no manager. Order the results by the employee number.

```
SELECT e.last_name AS Employee, e.employee_id AS Emp#,
m.last_name AS Manager, m.employee_id AS Mgr# FROM
employees e LEFT JOIN employees m ON e.manager_id =
m.employee_id ORDER BY e.employee_id;
```

8. Create a query that displays employee last names, department numbers, and all the employees who work in the same department as a given employee. Give each column an appropriate label

```
SELECT e1.last_name AS Employee, e1.department_id
AS Dept-ID, e2.last_name AS Colleague FROM employees
e1 JOIN employees e2 ON e1.department_id = e2.department_id
WHERE e1.employee_id <> e2.employee_id;
```

9. Show the structure of the JOB_GRADES table. Create a query that displays the name, job, department name, salary, and grade for all employees

```
DESCRIBE job_grades; SELECT
e.last_name, e.job_id, d.department_name, e.salary, j.grade_id
FROM employees e JOIN departments d ON e.department_id =
d.department_id JOIN job_grades j ON e.salary BETWEEN j.lowest_sal/
AND j.highest_sal;
```

10. Create a query to display the name and hire date of any employee hired after employee Davies.

```
SELECT e.last_name, e.hire_date FROM employees e WHERE
e.hire_date > (SELECT hire_date FROM employees
WHERE last_name = 'Davies');
```

11. Display the names and hire dates for all employees who were hired before their managers, along with their manager's names and hire dates. Label the columns Employee, Emp Hired, Manager, and Mgr Hired, respectively.

```
SELECT e.last_name AS Employee, e.hire_date AS Emp-Hired,
m.last_name AS Manager, m.hire_date AS Mgr-Hired
FROM employees e JOIN employees m ON e.manager_id
= m.employee_id WHERE e.hire_date < m.hire_date;
```

Evaluation Procedure	Marks awarded
Query(5)	5
Execution (5)	5
Viva(5)	5
Total (15)	15
Faculty Signature	<u>P. P.</u> 8/9/25