

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 department 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.department_id = 80;
```

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 e.commission_pct IS NOT NULL;
```

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

~~Select e.last_name, d.department_name FROM employee e
JOIN department 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_id, d.department_id,
d.department_name from employees e
JOIN departments d ON e.department_id = d.department_id
JOIN location 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 employee e
 LEFT JOIN employee 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 #",
       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
 ORDER BY e1.department_id, e1.last_name;
```

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

DESC job_grades;

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

```
Select last_name, hire_date FROM employees
 WHERE 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";
```

Evaluation Procedure	Marks awarded
Query(5)	5
Execution (5)	5
Viva(5)	5
Total (15)	15
Faculty Signature	