

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, d.department-id, d.department-name,  
FROM employees 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, d.location-id, l.city FROM  
employees e JOIN department-id = d.department-id JOIN  
location 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 FROM employees  
JOIN department d ON e.department-id WHERE  
e.commission_rate NOT NULL;
```

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

```
select e.lastname, d.department-name FROM employees  
e JOIN department d WHERE e.lastname 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.lastname, e.job-id, e.department-id, d.department-name  
FROM employees e JOIN department 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 l.lastname AS employee, e.employee-id AS  
emp#, m.lastname AS manager, m.employee-id  
AS manager_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 on e.manager_id = m  
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 e.last_name as employee, e.department_id as  
dept_id, e.last_name as college from employee e  
join employees on e.department_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.join
d.department e.salary g.grade_level from
employees where last_name = 'Davies';

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

```
select e.hirename e.hiredate from employees where  
e.hiredate > (select hire_date from employee 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_hire, m.last_name as manager, m.hire_date  
as mgr_hire from employee e join employee as  
m on e.manager_id;
```