

Ex. No:9  
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## SUB QUERIES

1. The HR department needs a query that prompts the user for an employee last name. The query then displays the last name and hire date of any employee in the same department as the employee whose name they supply (excluding that employee). For example, if the user enters Zlotkey, find all employees who work with Zlotkey (excluding Zlotkey).

```
SELECT e2.last_name, e2.hire_date
FROM employees e1
JOIN employees e2 ON e1.department_id = e2.department_id
WHERE e1.last_name = 'Zlotkey' AND e2.last_name != 'Zlotkey';
```

LAST_NAME	HIRE_DATE
Smith	03/22/2022
Adams	06/11/2023

2. Create a report that displays the employee number, last name, and salary of all employees who earn more than the average salary. Sort the results in order of ascending salary.

```
SELECT employee_id, last_name, salary
FROM employees
WHERE salary > (SELECT AVG(salary) FROM employees)
ORDER BY salary ASC;
```

EMPLOYEE_ID	LAST_NAME	SALARY
101	Zlotkey	6000
102	King	10000

3. Write a query that displays the employee number and last name of all employees who work in a department with any employee whose last name contains a u.

```
SELECT e1.employee_id, e1.last_name
FROM employees e1
WHERE e1.department_id IN (
    SELECT e2.department_id
```

```
FROM employees e2
WHERE e2.last_name LIKE '%u%'
);
```

4. The HR department needs a report that displays the last name, department number, and job ID of all employees whose department location ID is 1700.

```
SELECT e.last_name, e.department_id, e.job_id
FROM employees e
JOIN departments d ON e.department_id = d.department_id
WHERE d.location_id = 1700;
```

LAST_NAME	DEPARTMENT_ID	JOB_ID
King	90	AD_PRES

5. Create a report for HR that displays the last name and salary of every employee who reports to King.

```
SELECT e.last_name, e.salary
FROM employees e
JOIN employees m ON e.manager_id = m.employee_id
WHERE m.last_name = 'King';
```

LAST_NAME	SALARY
Smith	5000
Zlotkey	6000
Johnson	3000

6. Create a report for HR that displays the department number, last name, and job ID for every employee in the Executive department.

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

DEPARTMENT_ID	LAST_NAME	JOB_ID
90	King	AD_PRES

7. Modify the query 3 to display the employee number, last name, and salary of all employees who earn more than the average salary and who work in a department with any employee whose last name contains a u.

```
SELECT e1.employee_id, e1.last_name, e1.salary  
FROM employees e1  
WHERE e1.salary > (SELECT AVG(salary) FROM employees)  
AND e1.department_id IN (  
    SELECT e2.department_id  
    FROM employees e2  
    WHERE e2.last_name LIKE '%u%'  
);
```