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

LAST_NAME	HIRE_DATE
Smith	02/20/2019
Johnson	03/01/1998
Davis	01/01/1998
Miller	07/25/2018
Wilson	03/12/2022
Andrea	11/05/2017
Taylor	12/15/2019
Austin	08/22/2021
Thomas	04/01/2020
Doe	10/10/2015

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;

EMPLOYEE	EMP_HIRED	MANAGER	MGR_HIRED
Smith	02/20/2019	Matos	01/01/1994
Davis	01/01/1998	Matos	01/01/1994
Andrea	11/05/2017	Matos	01/01/1994
Wilson	03/12/2022	Johnson	03/01/1998
Thomas	04/01/2020	Miller	07/25/2018

Ex.No.: 9	**SUB QUERIES**

Date:		

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 e.last_name, e.hire_date FROM employees e JOIN employees e2 ON e.department_id = e2.department_id WHERE e2.last_name = :emp_name
AND e.employee_id != e2.employee_id;

LAST_NAME	HIRE_DATE
Johnson	03/01/1998
Austin	08/22/2021

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
176	Smith	12500
106	Wilson	13500
104	Davis	15000
107	Andrea	16000

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 DISTINCT e1.employee_id, e1.last_name FROM employees e1 JOIN employees e2 ON e1.department_id = e2.department_id WHERE e2.last_name LIKE '%u%';

EMPLOYEE_ID	LAST_NAME
101	Matos
103	Johnson
109	Austin

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
Miller	10	ST_CLERK
Andrea	10	IT_PROG

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	12500
Davis	15000
Andrea	16000

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
50	Matos	IT_PROG
50	Johnson	SA_MAN
50	Austin	AC_MGR

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
JOIN employees e2 ON e1.department_id = e2.department_id WHERE e2.last_name LIKE '%u%' AND e1.salary > (SELECT AVG(salary) FROM employees);

EMPLOYEE_ID	LAST_NAME	SALARY
106	Wilson	13500
104	Davis	15000