

## NESTED QUERIES

### *COMPARISON OPERATOR IN*

- Compares value  $v$  with a set (or multiset) of values  $V$
- Evaluates to TRUE if  $v$  is one of the elements in  $V$

- 1. Write a query to retrieve the first name, last name, salary and department id of employees whose salary is greater than all the employees working in department 5 ordered by department id.**

```
SELECT FIRST_NAME, LAST_NAME, SALARY, DEPARTMENT_ID FROM  
EMPLOYEES
```

```
WHERE SALARY > ALL(SELECT SALARY FROM EMPLOYEES WHERE  
DEPARTMENT_ID=5)
```

```
ORDER BY DEPARTMENT_ID;
```

- 2. Write a query to retrieve the first name, last name, department name and location id of each employee who are working in the departments located in location id 1700**

```
SELECT FIRST_NAME, LAST_NAME, DEPARTMENT_NAME,  
DEPARTMENTS.LOCATION_ID FROM EMPLOYEES, DEPARTMENTS
```

```
WHERE EMPLOYEES.DEPARTMENT_ID IN (SELECT DEPARTMENT_ID FROM  
DEPARTMENTS WHERE LOCATION_ID=1700)
```

```
AND EMPLOYEES.DEPARTMENT_ID=DEPARTMENTS.DEPARTMENT_ID ;
```

- 3. Write a query to display the first name, last name, salary, department id, job id for those employees who works in the same designation as the employee works whose id is 169.**

```
SELECT FIRST_NAME, LAST_NAME, SALARY, DEPARTMENT_ID, JOB_ID  
FROM EMPLOYEES
```

```
WHERE JOB_ID = ( SELECT JOB_ID FROM EMPLOYEES WHERE  
EMPLOYEE=169);
```

- 4. Write a query to display the employee id, employee name (first name and last name ) for all employees who earn more than the average salary.**

```
SELECT employee_id, first_name, last_name
FROM employees
WHERE salary > ( SELECT AVG(salary) FROM employees );
```

- 5. Write a query to display the employee first name, last name, employee id and salary of all employees who report to Payam.**

```
SELECT first_name, last_name, employee_id, salary
FROM employees
WHERE manager_id = (SELECT employee_id FROM employees WHERE first_name =
'Payam');
```

- 6. Write a query to display all the information of the employees who does not work in those departments where some employees works whose manager id within the range 100 and 200.**

```
SELECT *
FROM employees
WHERE department_id NOT IN (SELECT department_id FROM departments
WHERE manager_id BETWEEN 100 AND 200);
```

- 7. Write a query that will identify all employees who work in departments located in the United Kingdom.**

```
SELECT first_name
FROM employees
WHERE department_id IN
(SELECT department_id
FROM departments
WHERE location_id IN
(SELECT location_id
```

```

FROM locations
WHERE country_id =
(SELECT country_id
FROM countries
WHERE country_name='United Kingdom')));

```

- 8. Write a query which is looking for the names of all employees whose salary is greater than 50% of their department's total salary bill.**

```

SELECT e1.first_name, e1.last_name
FROM employees e1
WHERE salary >
( SELECT (SUM(salary))*0.5
FROM employees e2
WHERE e1.department_id=e2.department_id);

```

- 9. Write a query to display the department name and Id for all departments where they located, that Id is equal to the Id for the location where department number 30 is located.**

```

SELECT department_name, department_id
FROM departments
WHERE location_id = (SELECT location_id FROM departments WHERE
department_id = 30);

```

- 10. Write a query to display the full name (first and last name) of manager who is supervising 4 or more employees.**

```

SELECT first_name || ' ' || last_name AS Manager_name, department_id FROM employees
WHERE employee_id IN (SELECT manager_id FROM employees GROUP BY
manager_id HAVING COUNT(*)>=4);

```

- 11. Write a query in SQL to display the details of the current job for those employees who worked as a Sales Representative in the past.**

```
SELECT * FROM jobs
WHERE job_id IN (SELECT job_id FROM employees WHERE employee_id IN
(SELECT employee_id FROM job_history WHERE job_id='SA_REP'));
```