• A Nested query (Subquery) is a query written inside another query. It is used when the result of one query is needed by another.

Types of nested queries:-

① Single-row Subquery:- Returns one value

Ex:- Find employees with Salary above the average salary

SELECT EmpName, Salary FROM Employee WHERE Salary >

(SELECT AVG(SALARY) FROM Employee);

② Multiple-row Subquery:- Returns multiple values

Ex:- Find employees who are in the same department as "Alice Johnson" SELECT EmpName, Dept.

FROM Employee WHERE Dept IN (SELECT Dept FROM Employee WHERE EmpNAME ='Alice Johnson');

③ Nested with IN | ANY | ALL Operators:-

Ex:-Find employees earning more than any HR employee.

SELECT EmpName, Salary FROM Employee WHERE Salary > ANY (SELECT Salary FROM Employee WHERE Dept ='HR');

④ Correlated Subquery:- inner query depends on outer query

Ex:- Find employees with salary greather than the average of their department

SELECT EmpName, Dept, Salary FROM Employee WHERE Salary >

(SELECT Avg(Salary) FROM Employee WHERE Dept = e.Dept);

TASK 4.2:- Performing Query Processing using Nested Queries:-

① Find employees with the highest Salary.

SELECT EmpName, Salary FROM Student Employee WHERE Salary = (SELECT MAX(Salary) FROM Employee);

② Find employees who joined after Bob Smith.

SELECT EmpName, Joining Date FROM Employee WHERE Joining Date > (SELECT Joining Date FROM Employee WHERE EmpName = 'Bob Smith');

③ Find employees who are more than average Salary of IT department.

SELECT EmpName, Dept, Salary FROM Employee WHERE Salary > (SELECT AVG(Salary) FROM Employee WHERE Dept = 'IT');

④ Find employees from departments that have more than 2 employees.

SELECT EmpName, Dept FROM Employee WHERE Dept IN (SELECT Dept FROM Employee GROUP BY Dept HAVING COUNT(*) > 2);

⑤ Find employees working in the same city as 'David Brown'.

SELECT EmpName, City FROM Employee WHERE City = (SELECT City FROM Employee WHERE EmpName = 'David Brown');

RESULT:- Hence Study of Nested queries and performing queries done successfully.

VEL TECH - CSE	
EX NO.	4
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	-
TOTAL (20)	15
SIGN WITH DATE	15/5/17