## QUERYING USING SUBQUERIES – DATE: 13-06-2025

1) Querying Data by Using Subqueries

2) Querying Data by Using Subqueries Using the EXISTS,

3) Querying Data by Using Subqueries using ANY,

4) Querying Data by Using Subqueries using ALL Keywords

5) Querying Data by Using Subqueries using Using Nested Subqueries

6) Querying Data by Using Subqueries Using Correlated Subqueries

7) Querying Data by Using Subqueries Using UNION,

8) Querying Data by Using Subqueries using INTERSECT,

9) Querying Data by Using Subqueries using EXCEPT,

10)Querying Data by Using Subqueries using MERGE.

**Sample Table: Employees**

CREATE TABLE Employees (EmpID INT, Name VARCHAR(50), Department VARCHAR(50), Salary INT);

INSERT INTO Employees VALUES (1, 'Alice', 'HR', 5000);

INSERT INTO Employees VALUES (2, 'Bob', 'IT', 7000);

INSERT INTO Employees VALUES (3, 'Charlie', 'Finance', 6000);

INSERT INTO Employees VALUES (4, 'David', 'IT', 8000);

INSERT INTO Employees VALUES (5, 'Eva', 'HR', 5500);

INSERT INTO Employees VALUES (6, 'Frank', 'Finance', 6200);

**1. Querying Data by Using Subqueries**

Query:

SELECT Name FROM Employees WHERE Salary > (SELECT AVG(Salary) FROM Employees);

**2. Querying Data by Using Subqueries Using the EXISTS**

Query:

SELECT Name FROM Employees e WHERE EXISTS (SELECT 1 FROM Employees WHERE Department = 'IT' AND e.Department = Department);

**3. Querying Data by Using Subqueries using ANY**

Query:

SELECT Name FROM Employees WHERE Salary > ANY (SELECT Salary FROM Employees WHERE Department = 'HR');

**4. Querying Data by Using Subqueries using ALL Keywords**

Query:

SELECT Name FROM Employees WHERE Salary > ALL (SELECT Salary FROM Employees WHERE Department = 'HR');

**5. Querying Data by Using Subqueries using Nested Subqueries**

Query:

SELECT Name FROM Employees WHERE Salary = (SELECT MAX(Salary) FROM Employees WHERE Department = (SELECT Department FROM Employees WHERE Name = 'Charlie'));

**6. Querying Data by Using Subqueries Using Correlated Subqueries**

Query:

SELECT Name FROM Employees e1 WHERE Salary > (SELECT AVG(Salary) FROM Employees e2 WHERE e1.Department = e2.Department);

**7. Querying Data by Using Subqueries Using UNION**

Query:

SELECT Name FROM Employees WHERE Department = 'HR' UNION SELECT Name FROM Employees WHERE Salary > 7000;

**8. Querying Data by Using Subqueries using INTERSECT**

Query:

SELECT Name FROM Employees WHERE Department = 'IT' INTERSECT SELECT Name FROM Employees WHERE Salary > 7000;

**9. Querying Data by Using Subqueries using EXCEPT**

Query:

SELECT Name FROM Employees WHERE Department = 'IT' EXCEPT SELECT Name FROM Employees WHERE Salary > 7000;

**10. Querying Data by Using Subqueries using MERGE**

Query:

MERGE INTO Employees AS target USING (SELECT 2 AS EmpID, 'Bob' AS Name) AS source ON target.EmpID = source.EmpID WHEN MATCHED THEN UPDATE SET Salary = 7500;