Experiment 2.1

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Subject Name: ADBMS **Subject Code: 23CSP-333**

1. Aim: Organizational Hierarchy Explorer

2. Objective:

- You are a Database Engineer at TalentTree Inc., an enterprise HR analytics platform that stores employee data, including their reporting relationships. The company maintains a centralized Employee relation that holds: Each employee's ID, name, department, and manager ID (who is also an employee in the same table).
- Your task is to generate a report that maps employees to their respective managers, showing:
- The employee's name and department
- Their manager's name and department (if applicable)
- This will help the HR department visualize the internal reporting hierarchy.

3. Code:

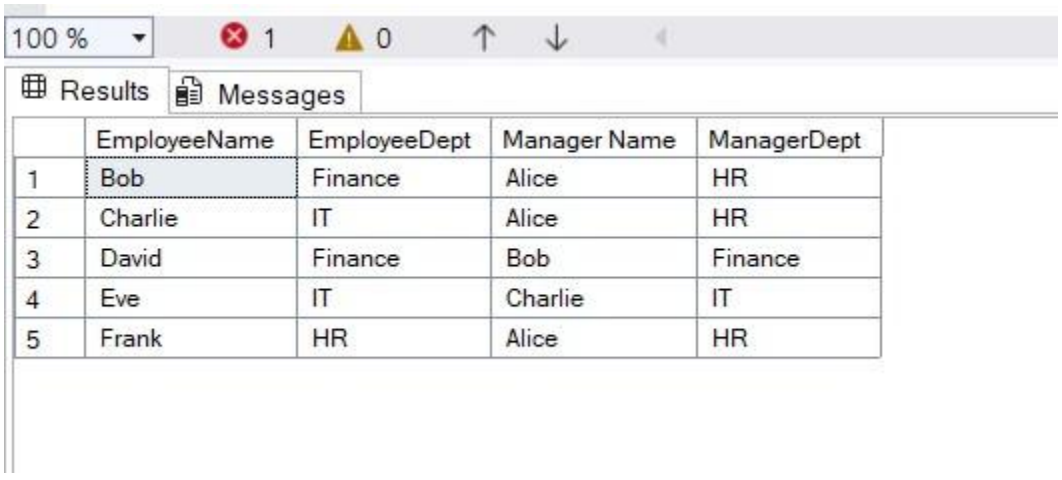
```
CREATE TABLE Employee (
   EmpID INT PRIMARY KEY,
   EmpName VARCHAR(50) NOT NULL,
   Department VARCHAR(50) NOT NULL,
   ManagerID INT NULL
);

ALTER TABLE Employee
ADD CONSTRAINT FK_Manager FOREIGN KEY (ManagerID) REFERENCES
Employee(EmpID);
```

```
INSERT INTO Employee (EmpID, EmpName, Department, ManagerID)
VALUES
(1, 'Alice', 'HR', NULL),
(2, 'Bob', 'Finance', 1),
(3, 'Charlie', 'IT', 1),
(4, 'David', 'Finance', 2),
(5, 'Eve', 'IT', 3),
(6, 'Frank', 'HR', 1);

SELECT
E.EmpName AS [EmployeeName],  E.Department
AS [EmployeeDept],
M.EmpName AS [Manager Name],
M.Department AS [ManagerDept]
FROM Employee AS E
JOIN Employee AS M
ON E.ManagerId = M.EmpID;
```

Output:



100 % 1 0

Results Messages

	EmployeeName	EmployeeDept	Manager Name	ManagerDept
1	Bob	Finance	Alice	HR
2	Charlie	IT	Alice	HR
3	David	Finance	Bob	Finance
4	Eve	IT	Charlie	IT
5	Frank	HR	Alice	HR