

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:

⊞ R	esults 🖺 Messa	ages		
	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