DROP TABLE IF EXISTS Employees;

DROP TABLE IF EXISTS Departments;

CREATE TABLE Departments (

DepartmentID INTEGER PRIMARY KEY,

DepartmentName TEXT NOT NULL

);

CREATE TABLE Employees (

EmployeeID INTEGER PRIMARY KEY,

FirstName TEXT NOT NULL,

LastName TEXT NOT NULL,

DepartmentID INTEGER,

Salary REAL,

JoinDate TEXT,

FOREIGN KEY (DepartmentID) REFERENCES Departments(DepartmentID)

);

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(1, 'HR'),

(2, 'Finance'),

(3, 'IT'),

(4, 'Marketing');

INSERT INTO Employees (EmployeeID, FirstName, LastName, DepartmentID, Salary, JoinDate) VALUES

(1, 'John', 'Doe', 1, 5000.00, '2020-01-15'),

(2, 'Jane', 'Smith', 2, 6000.00, '2019-03-22'),

(3, 'Michael', 'Johnson', 3, 7000.00, '2018-07-30'),

(4, 'Emily', 'Davis', 4, 5500.00, '2021-11-05');

CREATE VIEW EmployeeDetails AS

SELECT

e.EmployeeID,

e.FirstName,

e.LastName,

e.DepartmentID,

d.DepartmentName,

e.Salary,

e.JoinDate

FROM Employees e

JOIN Departments d ON e.DepartmentID = d.DepartmentID;

SELECT 'TEST 1: All Departments' AS TestDescription;

SELECT \* FROM Departments;

SELECT 'TEST 2: All Employees' AS TestDescription;

SELECT \* FROM Employees;

SELECT 'TEST 3: Employees in IT Department (ID=3)' AS TestDescription;

SELECT \* FROM EmployeeDetails WHERE DepartmentID = 3;

SELECT 'TEST 4: Insert New Employee' AS TestDescription;

INSERT INTO Employees (EmployeeID, FirstName, LastName, DepartmentID, Salary, JoinDate)

VALUES (5, 'Sarah', 'Wilson', 2, 6500.00, '2023-05-20');

SELECT 'TEST 5: Verify New Employee in Finance (ID=2)' AS TestDescription;

SELECT \* FROM EmployeeDetails WHERE DepartmentID = 2;

SELECT 'TEST 6: Invalid Department (ID=99)' AS TestDescription;

SELECT \* FROM EmployeeDetails WHERE DepartmentID = 99;

SELECT 'TEST 7: All Employee Details' AS TestDescription;

SELECT \* FROM EmployeeDetails;

**Output :**

