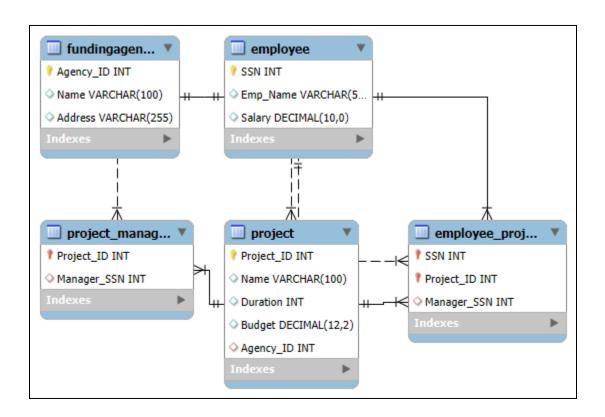
## **Project 1: Employee Research Project**



## 1. Employee Table

```
CREATE TABLE Employee (
    SSN INT PRIMARY KEY,
    Emp_Name VARCHAR(50),
    Salary DECIMAL
);
```

## 2. FundingAgency Table

```
CREATE TABLE FundingAgency (
     Agency_ID INT PRIMARY KEY,
     Name VARCHAR(100),
     Address VARCHAR(255)
);
```

```
3. Project Table
```

```
CREATE TABLE Project (
    Project_ID INT PRIMARY KEY,
    Name VARCHAR(100),
    Duration INT, -- Assuming duration in days/months
    Budget DECIMAL(12, 2),
    Agency_ID INT,
    FOREIGN KEY (Agency_ID) REFERENCES FundingAgency(Agency_ID)
);
4. Employee_Project Junction Table
CREATE TABLE Employee_Project (
    SSN INT,
    Project_ID INT,
    Manager_SSN INT,
    PRIMARY KEY (SSN, Project_ID),
    FOREIGN KEY (SSN) REFERENCES Employee(SSN),
    FOREIGN KEY (Project_ID) REFERENCES Project(Project_ID),
    FOREIGN KEY (Manager_SSN) REFERENCES Employee(SSN)
);
Project_Manager Table
CREATE TABLE Project_Manager (
    Project_ID INT PRIMARY KEY,
    Manager_SSN INT,
    FOREIGN KEY (Project_ID) REFERENCES Project(Project_ID),
    FOREIGN KEY (Manager_SSN) REFERENCES Employee(SSN)
);
```

```
-- 1) Employee
INSERT INTO Employee (SSN, Emp_Name, Salary) VALUES
(101, 'John Doe', 55000.00),
(102, 'Jane Smith', 65000.00),
(103, 'Alice Brown', 72000.00);
-- 2) FundingAgency
```

INSERT INTO FundingAgency (Agency\_ID, Name, Address) VALUES (201, 'Tech Research Fund', '123 Tech Ave, Silicon Valley, CA'), (202, 'Innovation Grants Inc.', '456 Innovation Dr, New York, NY'), (203, 'Global Funding Group', '789 Global St, London, UK');

## -- 3) Project

**INSERT INTO Project VALUES** 

(301, 'AI Research', 12, 200000.00,201), (302, 'Cloud Migration', 18, 300000.00,202), (303, 'Blockchain Platform', 24, 400000.00,202);

-- 4) Project\_Manager (one manager per project)
INSERT INTO Project\_Manager (Project\_ID, Manager\_SSN) VALUES (301, 101),
(302, 102),
(303, 103);

-- 5) Employee\_Project (who works on which project, with that project's manager) INSERT INTO Employee\_Project (SSN, Project\_ID, Manager\_SSN) VALUES (101, 301, 101), -- John manages & works on Al Research (102, 302, 102), -- Jane manages & works on Cloud Migration (103, 303, 103); -- Alice manages & works on Blockchain Platform

