



IT Project Management & Resource Allocation system

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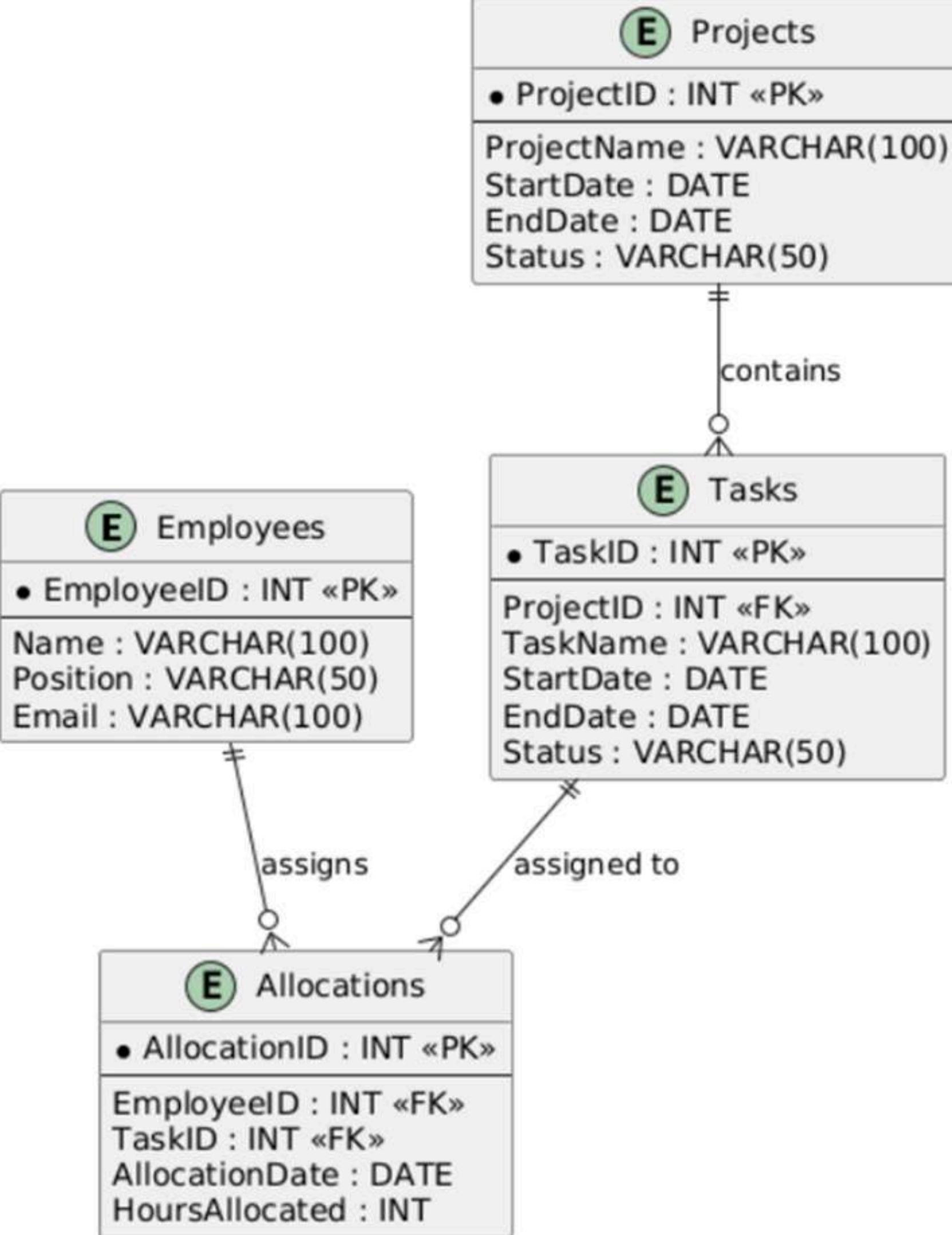
Aim:

The aim of IT project management and resource allocation systems is to ensure efficient planning, coordination, and optimization of resources to successfully deliver IT projects within scope, budget, and timeline constraints.

Objective:

1. Manage Project Timelines: Facilitate scheduling and sequencing of project tasks to meet deadlines and milestones effectively.
2. Control Project Costs: Monitor and control project expenditures to ensure adherence to budgetary constraints and financial goals.

ER Diagram





TABLES INCLUDED:

- EMPLOYEES TABLE.
 - PROJECT TABLE
 - TASKS TABLE
 - ALLOCATION TABLE
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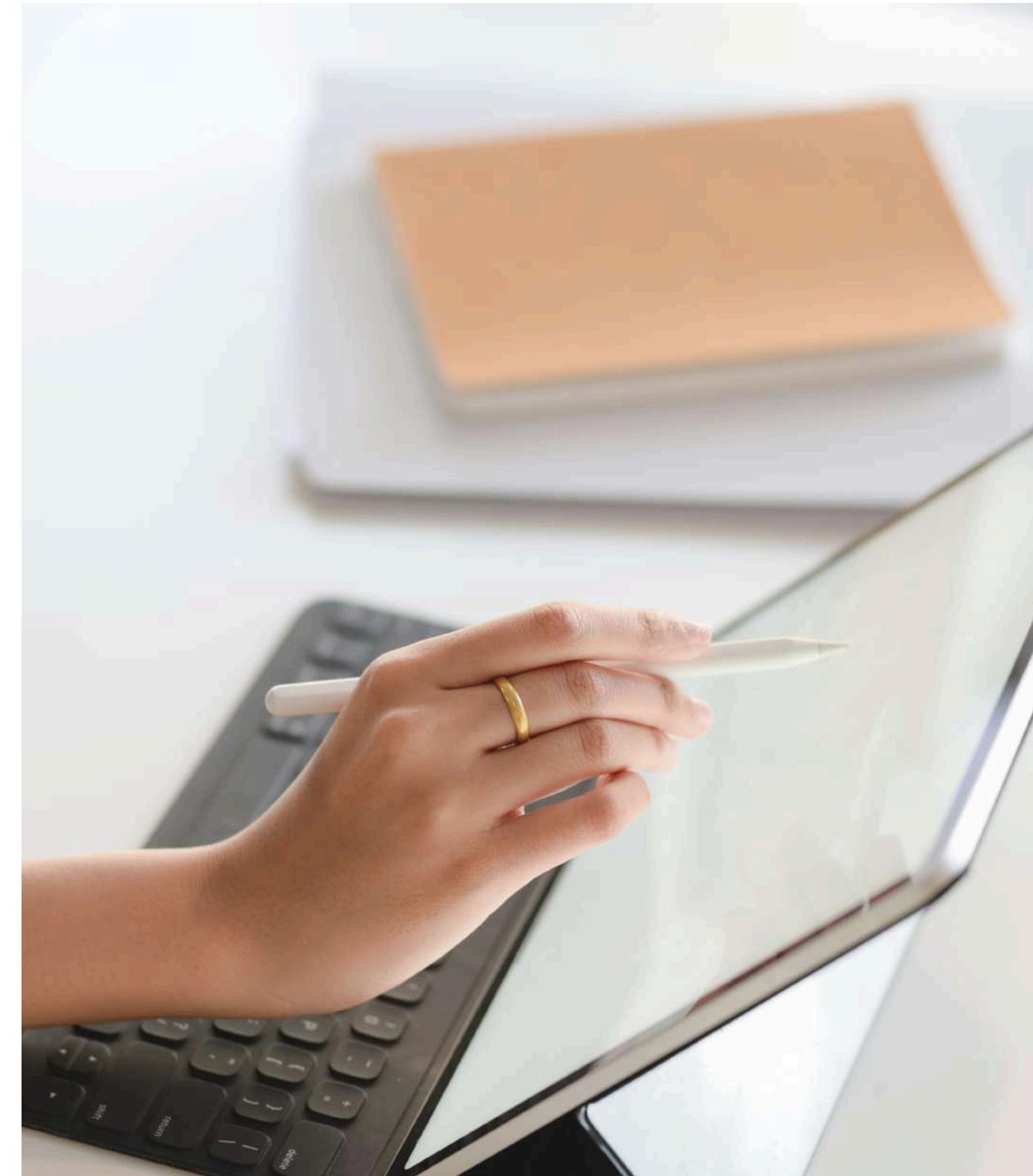
EMPLOYEES TABLE



```
1 CREATE TABLE Employees (
2     EmployeeID INT PRIMARY KEY,
3     Name VARCHAR(100) NOT NULL,
4     Position VARCHAR(50) NOT NULL,
5     Email VARCHAR(100) NOT NULL
6* )
SQL> /
```

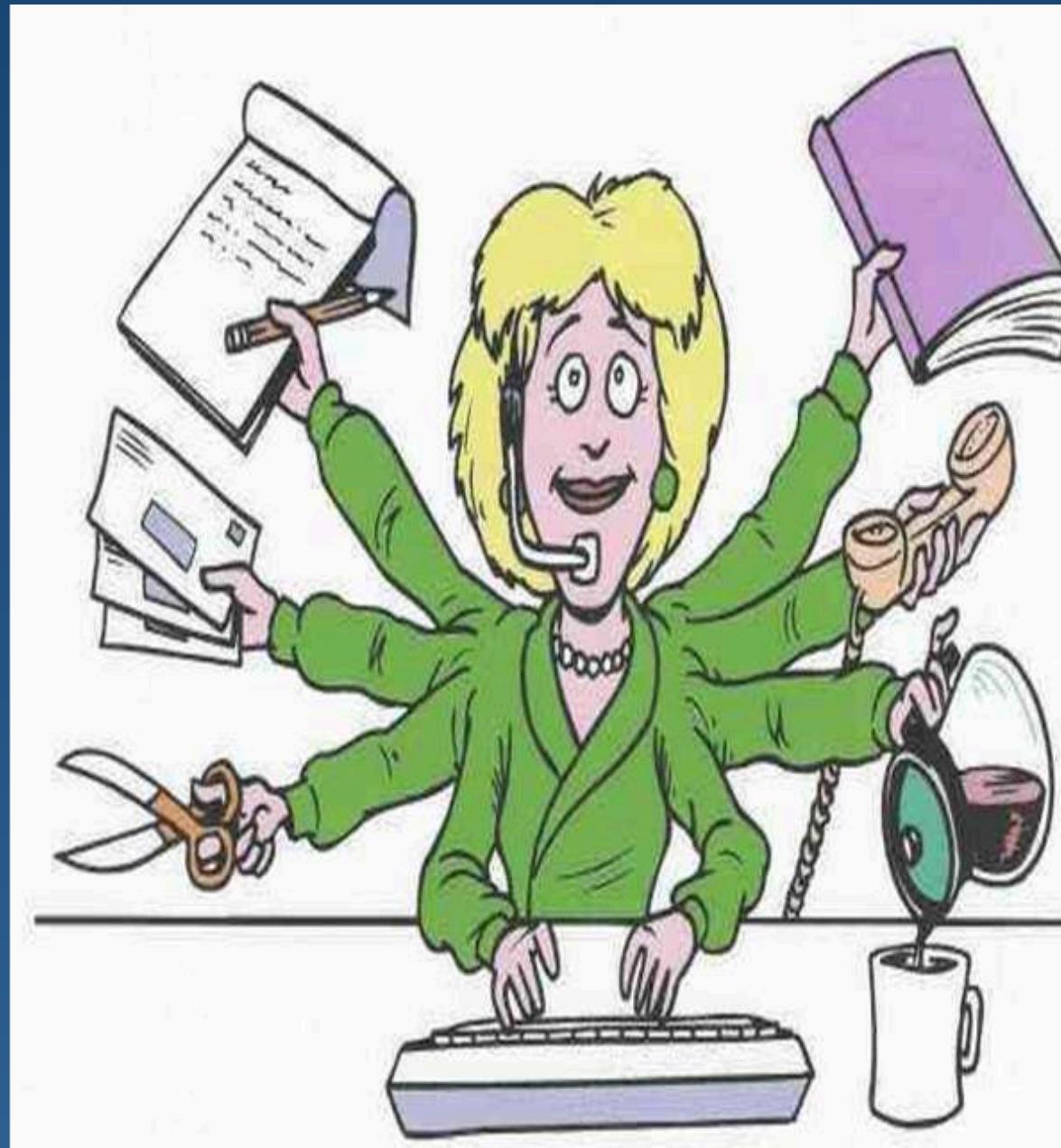
PROJECTS TABLE

```
1 CREATE TABLE Projects (
2     ProjectID INT PRIMARY KEY,
3     ProjectName VARCHAR(100) NOT NULL,
4     StartDate DATE NOT NULL,
5     EndDate DATE NOT NULL,
6     Status VARCHAR(50) NOT NULL
7* )
SQL> /
Table created.
```



TASKS TABLE

```
1 CREATE TABLE Tasks (
2     TaskID INT PRIMARY KEY,
3     ProjectID INT,
4     TaskName VARCHAR(100) NOT NULL,
5     StartDate DATE NOT NULL,
6     EndDate DATE NOT NULL,
7     Status VARCHAR(50) NOT NULL,
8     FOREIGN KEY (ProjectID) REFERENCES Projects(ProjectID)
9* )
SQL> /
```



ALLOCATIONS

TABLE

```
1 CREATE TABLE Allocations (
2     AllocationID INT PRIMARY KEY,
3     EmployeeID INT,
4     TaskID INT,
5     AllocationDate DATE NOT NULL,
6     HoursAllocated INT NOT NULL,
7     FOREIGN KEY (EmployeeID) REFERENCES Employees(EmployeeID),
8     FOREIGN KEY (TaskID) REFERENCES Tasks(TaskID)
9* )
SQL> /
Table created.
```



Conclusion



- In the phase-1 of project we have successfully created following tables:
 1. Employees table
 2. Projects table
 3. Tasks Table
 4. Allocation Table

In IT project management and resource allocation system boosts efficiency by optimizing resource use, enhancing collaboration and providing real-time insights. This leads to better project satisfaction and growth and success.



**Thank
You**

