MSSV:

Họ tên SV:

Notes: Filename: Lab01\_HoTen\_MSSV.docx

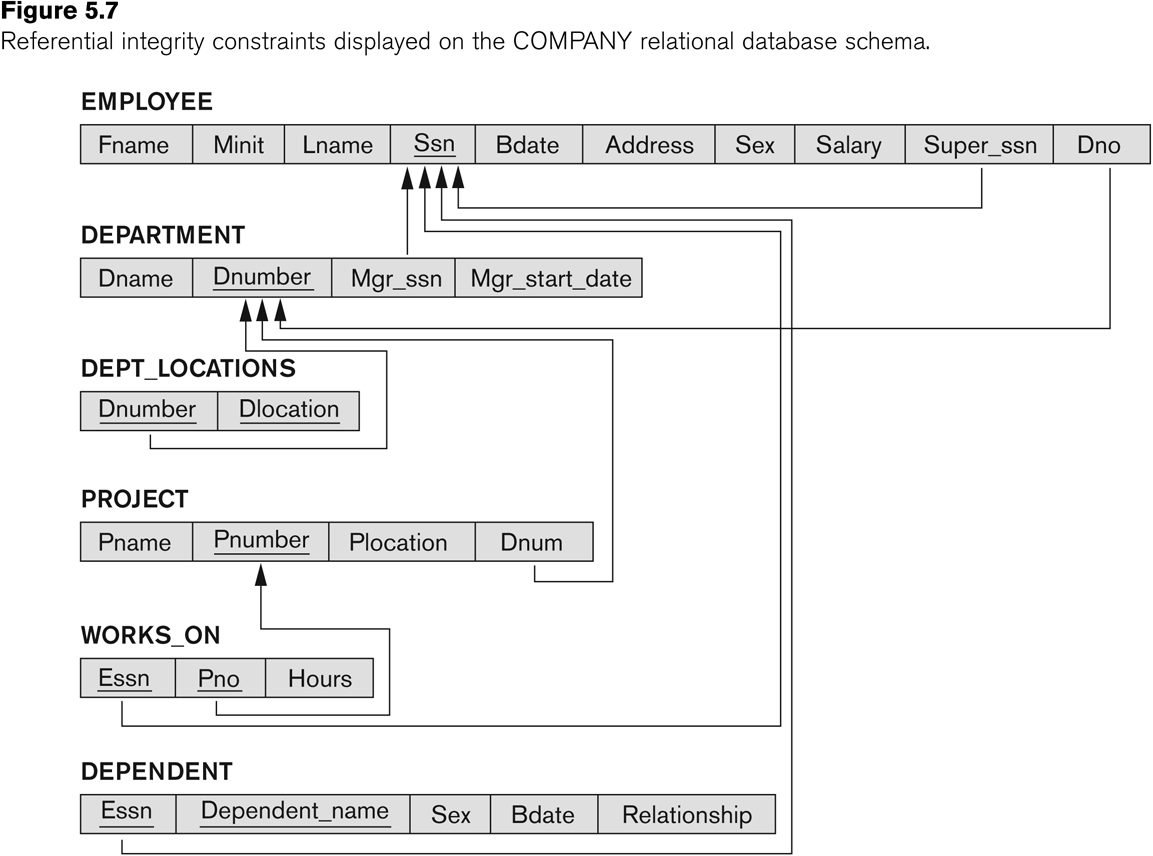
**Lab 01**

**Company Database**

1. **Create Database Company**
2. CREATE DATABASE Company ON PRIMARY
3. (
4. NAME = 'Company',
5. FILENAME = 'D:\Desktop\WorkSpace\SQL\InSchool\Week 1\Company.mdf',
6. SIZE = 3072KB,
7. MAXSIZE = UNLIMITED,
8. FILEGROWTH = 1024KB
9. )
10. LOG ON
11. (
12. NAME = 'Company\_log',
13. FILENAME = 'D:\Desktop\WorkSpace\SQL\InSchool\Week 1\Company\_log.ldf',
14. SIZE = 1024KB,
15. MAXSIZE = 2048KB,
16. FILEGROWTH = 10%
17. );
18. --GO
19. GO

*Note*: Save to file **Company\_DB.sql**

1. **Create tables – Primary Key – Foreign Key**



**Table Structure:**

* Department

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data Type** | **Null** |
| DName | varchar(15) | NOT NULL |
| **DNumber** | numeric(4, 0) | NOT NULL |
| Mgrssn | char(9) | NULL |
| MgrStartdate | datetime | NULL |

* Employee

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data Type** | **Null** |
| FName | varchar(15) | NOT NULL |
| MInit | varchar(1) | NULL |
| LName | varchar(15) | NOT NULL |
| **SSN** | char(9) | NOT NULL |
| BDate | datetime | NULL |
| Address | varchar(30) | NULL |
| Sex | char(1) | NULL |
| Salary | numeric(10, 2) | NULL |
| SuperSSN | char(9) | NULL |
| DNo | numeric(4, 0) | NULL |

* Dept\_Location

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data Type** | **Null** |
| **DNumber** | numeric(4, 0) | NOT NULL |
| **DLocation** | varchar(15) | NOT NULL |

* Project

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data Type** | **Null** |
| PName | varchar(15) | NOT NULL |
| **PNumber** | numeric(4, 0) | NOT NULL |
| PLocation | varchar(15) | NULL |
| DNum | numeric(4, 0) | NOT NULL |

* Works\_On

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data Type** | **Null** |
| **ESSN** | char(9) | NOT NULL |
| **PNo** | numeric(4, 0) | NOT NULL |
| Hours | numeric(4, 1) | NULL |

* Dependent

|  |  |  |
| --- | --- | --- |
| **Field Name** | **Data Type** | **Null** |
| **ESSN** | char(9) | NOT NULL |
| **Dependent\_Name** | varchar(15) | NOT NULL |
| Sex | char(1) | NULL |
| BDate | datetime | NULL |
| Relationship | varchar(8) | NULL |

*Note*: Save to file **Company\_DB.sql**

--Tables

USE Company

--Create table Deparment

CREATE TABLE Deparment

(

DName varchar(15) NOT NULL,

DNumber numeric(4,0) NOT NULL,

MgrSsn char(9) NULL,

MgrStartdate datetime NULL

);

GO

--create Employee table

CREATE TABLE Employee

(

FName varchar(15) NOT NULL,

Mlnit varchar(1) NULL,

LName varchar(15) NOT NULL,

SSN char(9) NOT NULL,

BDate datetime NULL,

Address varchar(30) NULL,

Sex char(1) NULL,

Salary numeric(10,2) NULL,

SuperSSN char(9) NULL,

DNo numeric(4,0) NULL

);

GO

--Create Deparment Location Table

CREATE TABLE Dept\_Location

(

DNumber numeric(4,0) NOT NULL,

Dlocation varchar(15) NOT NULL

);

GO

--Create Project Table

CREATE TABLE Project

(

PName varchar(15) NOT NULL,

PNumber numeric(4,0) NOT NULL,

PLocation varchar(15) NULL,

DNum numeric(4,0) NOT NULL

);

GO

--Create Works\_On Table

CREATE TABLE Works\_On

(

ESSN char(9) NOT NULL,

PNo numeric(4,0) NOT NULL,

Hours numeric(4,1) NULL

);

GO

--Create Dependent Table

CREATE TABLE Dependent

(

ESSN char(9) NOT NULL,

Dependent\_Name varchar(15) NOT NULL,

Sex char(1) NULL,

BDate datetime NULL,

Relationship varchar(8) NULL

);

GO

--Primary key

--Primare key for Deparment table

ALTER TABLE Deparment

ADD Constraint pk\_Dept PRIMARY KEY(DNumber);

GO

--Primary key for Employee table

ALTER TABLE Employee

ADD Constraint pk\_Emp PRIMARY KEY(SSN);

GO

--Primary key for deparment location

ALTER TABLE Dept\_Location

ADD Constraint pk\_Dept\_Loca PRIMARY KEY(DNumber, DLocation);

GO

--primary key for Project

ALTER TABLE Project

ADD Constraint pk\_Proj PRIMARY KEY(PNumber);

GO

--primary key for works on

ALTER TABLE Works\_On

ADD Constraint pk\_works\_on PRIMARY KEY(ESSN, PNo);

GO

--primary key for Dependent

ALTER TABLE Dependent

ADD Constraint pk\_Dependent PRIMARY KEY(ESSN, Dependent\_Name);

GO

--Foreign key

--Foreign Key for Deparment

ALTER TABLE Deparment

ADD Constraint fk\_Mgrssn FOREIGN KEY(Mgrssn)

REFERENCES Employee(SSN);

GO

--Foreign Key for Employee

ALTER TABLE Employee

ADD Constraint fk\_SuperSSN FOREIGN KEY(SuperSSN)

REFERENCES Employee(SSN);

GO

ALTER TABLE Employee

ADD Constraint fk\_DNo Foreign key(DNo)

REFERENCES Deparment(DNumber);

GO

--Foreign Key for Deparment Location

ALTER TABLE Dept\_Location

ADD Constraint fk\_DNumber FOREIGN KEY(DNumber)

REFERENCES Deparment(DNumber);

GO

--Forgein Key for project

ALTER TABLE Project

ADD Constraint fk\_DNum FOREIGN KEY (DNum)

REFERENCES Deparment(DNumber);

GO

--Foreign Key for works on

ALTER TABLE Works\_On

ADD Constraint fk\_PNo FOREIGN KEY (PNo)

REFERENCES Project(PNumber);

GO

ALTER TABLE Works\_On

ADD Constraint fk\_ESSN FOREIGN KEY (ESSN)

REFERENCES Employee(SSN);

GO

--Foreign Key for Dependent

ALTER TABLE Dependent

ADD Constraint fk\_depen\_ESSN FOREIGN KEY (ESSN)

REFERENCES Employee(SSN);

GO

**END**