MSSV:

Họ tên SV:

Notes: Filename: Lab01\_HoTen\_MSSV.docx

**Lab 01**

**Company Database**

1. **Create Database Company**

CREATE DATABASE Company ON PRIMARY

( NAME = 'Company',

FILENAME = 'E:\DATA\Company.mdf' ,

SIZE = 3072KB ,

MAXSIZE = UNLIMITED,

FILEGROWTH = 1024KB )

LOG ON

( NAME = 'Company\_log',

FILENAME = 'E:\DATA\Company\_log.ldf' ,

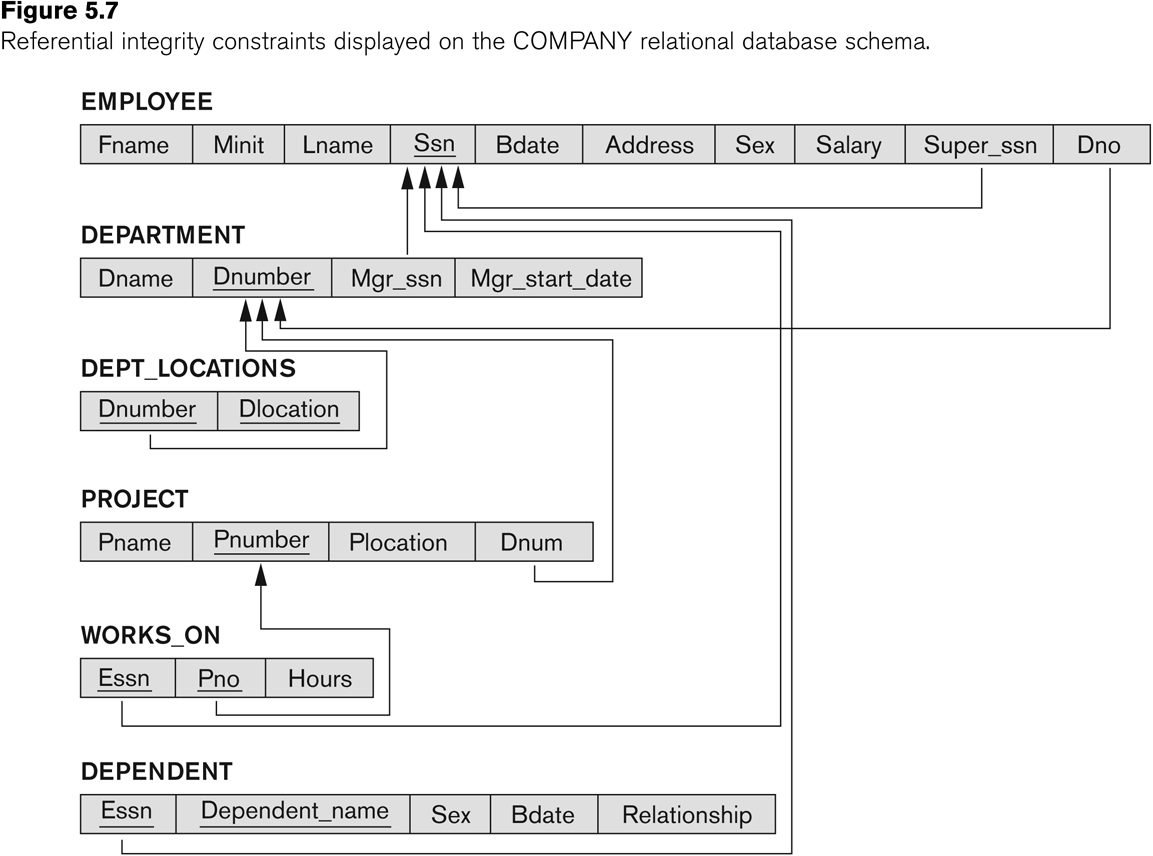
SIZE = 1024KB ,

MAXSIZE = 2048KB ,

FILEGROWTH = 10%)

*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

CREATE DATABASE CompanyZinh ON PRIMARY

( NAME = 'CompanyZinh',

FILENAME = 'D:\Co so du lieu\CompanyZinh.mdf' ,

SIZE = 3072KB ,

MAXSIZE = UNLIMITED,

FILEGROWTH = 1024KB )

LOG ON

( NAME = 'CompanyZinh\_log',

FILENAME = 'D:\Co so du lieu\CompanyZinh\_log.ldf' ,

SIZE = 1024KB ,

MAXSIZE = 2048KB ,

FILEGROWTH = 10%)

Use CompanyZinh

Go

--Tao bang

Create Table Department(

DName varchar(15) NOT NULL,

DNumber numeric(4, 0) NOT NULL,

Mgrssn char(9) NULL,

MgrStartdate datetime NULL);

Create Table Employee(

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);

Create Table Dept\_Location(

DNumber numeric(4, 0) NOT NULL,

DLocation varchar(15) NOT NULL);

Create Table Project(

PName varchar(15) NOT NULL,

PNumber numeric(4, 0) NOT NULL,

PLocation varchar(15) NULL,

DNum numeric(4, 0) NOT NULL);

Create Table Works\_On(

ESSN char(9) NOT NULL,

PNo numeric(4, 0) NOT NULL,

Hours numeric(4, 1) NULL);

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);

--Tao Khoa Chinh

ALTER TABLE Department

ADD Constraint pk\_Dept PRIMARY KEY (DNumber);

GO

ALTER TABLE Employee

ADD Constraint pk\_Emp PRIMARY KEY (SSN);

GO

ALTER TABLE Dept\_Location

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

GO

ALTER TABLE Project

ADD Constraint pk\_Pro PRIMARY KEY (PNumber);

GO

ALTER TABLE Works\_On

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

GO

ALTER TABLE Dependent

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

GO

--Tao Khoa Ngoai

ALTER TABLE Department

ADD constraint fk\_DeptMgrssn FOREIGN KEY(Mgrssn) REFERENCES Employee(SSN);

GO

ALTER TABLE Employee

ADD Constraint fk\_EmpDNo FOREIGN KEY(DNo) REFERENCES Department(DNumber);

GO

ALTER TABLE Employee

ADD Constraint fk\_EmpSuperSSN FOREIGN KEY(SuperSSN) REFERENCES Employee(SSN);

GO

ALTER TABLE Dept\_Location

ADD Constraint fk\_Dept\_Dnumber FOREIGN KEY(DNumber) REFERENCES Department(Dnumber);

GO

ALTER TABLE Project

ADD Constraint fk\_Pro\_Dnum FOREIGN KEY(DNum) REFERENCES Department(Dnumber);

GO

ALTER TABLE Works\_On

ADD Constraint fk\_Works\_Essn FOREIGN KEY(ESSN) REFERENCES Employee(SSN);

GO

ALTER TABLE Works\_On

ADD Constraint fk\_Works\_Pno FOREIGN KEY(PNo) REFERENCES Project(Pnumber);

GO

ALTER TABLE Dependent

ADD Constraint fk\_Dep\_Essn FOREIGN KEY(ESSN) REFERENCES Employee(SSN);

GO

**END**