

CIS530– Lab Assignment 1

Name: Reza Shisheie

ID: 2708062

Object: Creating a Relational Database Schema Using SQL and SQL Server

SQL Code:

```
USE master;
```

```
-- define a data base called "COMPANY"
```

```
IF DB_ID('COMPANY') IS NULL  
    CREATE DATABASE COMPANY;
```

```
GO
```

```
use COMPANY;
```

```
go
```

```
-- Create a Table EMPLOYEE in COMPANY database
```

```
IF OBJECT_ID('dbo.EMPLOYEE') IS NULL
```

```
    create table EMPLOYEE (  
        Fname VARCHAR(15) NOT NULL,  
        Minit CHAR,  
        Lname VARCHAR(15) NOT NULL,  
        Ssn CHAR(9) NOT NULL,  
        Bdate DATE,  
        Address VARCHAR(30),  
        Sex CHAR,  
        Salary DECIMAL(10,2),  
        Super_ssn CHAR(9),  
        Dno INT  
    );
```

```
-- Create a Table DEPARTMENT in COMPANY database
```

```
IF OBJECT_ID('dbo.DEPARTMENT') IS NULL
```

```
    CREATE TABLE dbo.DEPARTMENT(  
        Dname VARCHAR(15) NOT NULL,  
        Dnumber INT NOT NULL,  
        Mgr_ssn CHAR(9) NOT NULL,  
        Mgr_start_date DATE  
    );
```

```
--Let's insert data into EMPLOYEE
```

```
insert into EMPLOYEE values ( 'John', 'B' , 'Smith', '123456789', '9-Jan-55', '731 Fondren,  
Houston, TX', 'M', '30000', '987654321', '5');
```

```
insert into EMPLOYEE values ( 'Franklin', 'T' , 'Wong', '333445555', '08-Dec-45', '638 Voss,  
Houston, TX', 'M', '40000', '888665555', '5');
```

```
insert into EMPLOYEE values ( 'Joyce', 'A' , 'English', '453453453', '31-Jul-62', '5631  
Rice, Houston, TX', 'F', '25000', '333445555', '5');
```

```
insert into EMPLOYEE values ( 'Ramesh', 'K' , 'Narayan', '666884444', '15-Sep-52', '975 Fire  
Oak, Humble, TX', 'M', '38000', '333445555', '5');
```

```
insert into EMPLOYEE values ( 'James', 'E' , 'Borg', '888665555', '10-Nov-27', '450 Stone,  
Houston, TX', 'M', '55000', '1', '1');
```

```
insert into EMPLOYEE values ( 'Jennifer', 'S' , 'Wallace', '987654321', '20-Jun-31', '291  
Berry, Bellaire, TX', 'F', '43000', '888665555', '4');
```

CIS530– Lab Assignment 1

Name: Reza Shisheie

ID: 2708062

Object: Creating a Relational Database Schema Using SQL and SQL Server

```
insert into EMPLOYEE values ( 'Ahmad', 'V' , 'Jabbar', '987987987', '29-Mar-59', '980
Dallas, Houston, TX', 'M', '25000', '987654321', '4');
insert into EMPLOYEE values ( 'Alicia', 'J' , 'Zelaya', '999887777', '19-Jul-58', '3321
Castle, SPring, TX', 'F', '25000', '987654321', '4');
```

```
--This Select Query will Show tables
select * from EMPLOYEE;
```

```
--Let's insert data into DEPARTMENT
insert into DEPARTMENT values ( 'Headquarters', '1' , '888665555', '19-Jun-71');
insert into DEPARTMENT values ( 'Administration', '4' , '987654321', '01-Jan-85');
insert into DEPARTMENT values ( 'Research', '5' , '333445555', '22-May-78');
insert into DEPARTMENT values ( 'Automation', '7' , '123456789', '06-Oct-05');
```

```
--This Select Query will Show tables
select * from DEPARTMENT;
```

```
-- This will delete the whole table making it ready for next execution
drop table EMPLOYEE;
drop table DEPARTMENT;
```

Results:

Fname	Minit	Lname	Ssn	Bdate	AddressSex	Salary	Super_ssn	Dno
John	B	Smith	123456789	1955-01-09	731 Fondren, Houston, TX	M		
			30000.00		987654321	5		
Franklin	T	Wong	333445555	2045-12-08	638 Voss, Houston, TX	M	40000.00	
			888665555	5				
Joyce	A	English	453453453	1962-07-31	5631 Rice, Houston, TX	F	25000.00	
			333445555	5				
Ramesh	K	Narayan	666884444	1952-09-15	975 Fire Oak, Humble, TX	M		
			38000.00		333445555	5		
James	E	Borg	888665555	2027-11-10	450 Stone, Houston, TX	M	55000.00	
	1							
Jennifer	S	Wallace	987654321	2031-06-20	291 Berry, Bellaire, TX	F	43000.00	
			888665555	4				
Ahmad	V	Jabbar	987987987	1959-03-29	980 Dallas, Houston, TX	M	25000.00	
			987654321	4				
Alicia	J	Zelaya	999887777	1958-07-19	3321 Castle, SPring, TX	F	25000.00	
			987654321	4				

CIS530– Lab Assignment 1

Name: Reza Shisheie

ID: 2708062

Object: Creating a Relational Database Schema Using SQL and SQL Server

Results										
	Fname	Minit	Lname	Ssn	Bdate	Address	Sex	Salary	Super_ssn	Dno
1	John	B	Smith	123456789	1955-01-09	731 Fondren, Houston, TX	M	30000.00	987654321	5
2	Franklin	T	Wong	333445555	2045-12-08	638 Voss, Houston, TX	M	40000.00	888665555	5
3	Joyce	A	English	453453453	1962-07-31	5631 Rice, Houston, TX	F	25000.00	333445555	5
4	Ramesh	K	Narayan	666884444	1952-09-15	975 Fire Oak, Humble, TX	M	38000.00	333445555	5
5	James	E	Borg	888665555	2027-11-10	450 Stone, Houston, TX	M	55000.00		1
6	Jennifer	S	Wallace	987654321	2031-06-20	291 Berry, Bellaire, TX	F	43000.00	888665555	4
7	Ahmad	V	Jabbar	987987987	1959-03-29	980 Dallas, Houston, TX	M	25000.00	987654321	4
8	Alicia	J	Zelaya	999887777	1958-07-19	3321 Castle, SPring, TX	F	25000.00	987654321	4

	Dname	Dnumber	Mgr_ssn	Mgr_start_date
1	Headquarters	1	888665555	1971-06-19
2	Administration	4	987654321	1985-01-01
3	Research	5	333445555	1978-05-22
4	Automation	7	123456789	2005-10-06

SQLQuery1.sql - DESKTOP-845STNS\COMPANY (DESKTOP-845STNS\ARSH (56)) - Microsoft SQL Server Management Studio

Object Explorer: DESKTOP-845STNS (SQL Server 13.0.40) > Databases > COMPANY > Tables

SQLQuery1.sql - D..845STNS\ARSH (56) > X

```
USE master;
-- define a data base called "COMPANY"
IF DB_ID("COMPANY") IS NULL
CREATE DATABASE COMPANY;
GO
USE COMPANY;
GO
-- Create a Table EMPLOYEE in COMPANY database
IF OBJECT_ID('dbo.EMPLOYEE') IS NULL
CREATE TABLE EMPLOYEE (
    Fname VARCHAR(15) NOT NULL,
    Minit CHAR,
    Lname VARCHAR(15) NOT NULL,
    Ssn CHAR(9) NOT NULL,
    Bdate DATE,
    Address VARCHAR(30),
    Sex CHAR,
    Salary DECIMAL(10,2),
    Super_ssn CHAR(9),
    Dno INT
);
-- Create a Table DEPARTMENT in COMPANY database
IF OBJECT_ID('dbo.DEPARTMENT') IS NULL
CREATE TABLE DEPARTMENT (
    Dname VARCHAR(15) NOT NULL,
    Dnumber INT,
    Mgr_ssn CHAR(9),
    Mgr_start_date DATE
);
```

Results: 12 rows

	Fname	Minit	Lname	Ssn	Bdate	Address	Sex	Salary	Super_ssn	Dno
1	John	B	Smith	123456789	1955-01-09	731 Fondren, Houston, TX	M	30000.00	987654321	5
2	Franklin	T	Wong	333445555	2045-12-08	638 Voss, Houston, TX	M	40000.00	888665555	5
3	Joyce	A	English	453453453	1962-07-31	5631 Rice, Houston, TX	F	25000.00	333445555	5
4	Ramesh	K	Narayan	666884444	1952-09-15	975 Fire Oak, Humble, TX	M	38000.00	333445555	5
5	James	E	Borg	888665555	2027-11-10	450 Stone, Houston, TX	M	55000.00		1
6	Jennifer	S	Wallace	987654321	2031-06-20	291 Berry, Bellaire, TX	F	43000.00	888665555	4
7	Ahmad	V	Jabbar	987987987	1959-03-29	980 Dallas, Houston, TX	M	25000.00	987654321	4
8	Alicia	J	Zelaya	999887777	1958-07-19	3321 Castle, SPring, TX	F	25000.00	987654321	4

	Dname	Dnumber	Mgr_ssn	Mgr_start_date
1	Headquarters	1	888665555	1971-06-19
2	Administration	4	987654321	1985-01-01
3	Research	5	333445555	1978-05-22
4	Automation	7	123456789	2005-10-06

Query executed successfully. DESKTOP-845STNS (13.0 SP1) DESKTOP-845STNS\ARSH (56) COMPANY 00:00:00 12 rows

Properties: COMPANY > Current connection parameters > Connection failure: Connection failure: 00:00:00.265

Connection details: Connection name: DESKTOP-845STNS (DESKTOP-845STNS\ARSH (56))