# **Company Database Schema**

Here is the schema of a company database, please implement it on any RDBMS you like and then try to create the following requests (queries): "create only the dependent table with all data and relations"

## Employee:

Fname	Lname	SSN	BDATE	Addresss	Sex	Salary	Superssn	Dno
Ahmed	Ali	112233	1/1/1965	15 Ali fahmy	M	1300	223344	10
				St.Giza				
Kamel	Mohamed	223344	15/10/1970	38 Mohy el dien	M	1800	321654	10
				abo el Ezz				
				St.Cairo				
Hanaa	Sobhy	123456	18/3/1973	38 Abdel Khalik	F	800	223344	10
				Tharwat St.				
				Downtown.Cairo				
Amr	Omran	321654	14/9/1963	44 Hilopolis.Cairo	M	2500	null	null
Noha	Mohamed	968574	1/2/1975	55 Orabi St. El	F	1600	321654	20
				Mohandiseen				
				.Cairo				
Edward	Hanna	512463	19/8/1972	18 Abaas El	M	1500	321654	30
				3akaad St. Nasr				
				City.Cairo				
Mariam	Adel	669955	12/6/1982	269 El-Haram st.	F	750	512463	20
				Giza				
Maged	Raoof	521634	6/4/1980	18 Kholosi	M	1000	968574	30
				st.Shobra.Cairo				

## **Department**

Dname	DNum	MGRSSN	MGRStart Date
DP1	10	223344	1/1/2005
DP2	20	968574	1/3/2006
DP3	30	512463	1/6/2006

# Works\_for

ESSN	Pno	Hours
223344	100	10
223344	200	10
223344	300	10
112233	100	40
968574	400	15
968574	700	15
968574	300	10
669955	400	20
223344	500	10
669955	700	7
669955	300	10
512463	500	10
512463	600	25
521634	500	10
521634	600	20
521634	300	6
521634	400	4

**Project** 

Pname	Pnumber	Plocation	City	Dnum
AL Solimaniah	100	Cairo_Alex Road	Alex	10
Al Rabwah	200	6 <sup>th</sup> of October	Giza	10
		City		
Al Rawdah	300	Zaied City	Giza	10
Al Rowad	400	Cairo_Faiyom	Giza	20
		Road		
Al Rehab	500	Nasr City	Cairo	30
Pitcho american	600	Maady	Cairo	30
Ebad El	700	Ring Road	Cairo	20
Rahman				

**Dependent** 

ESSN	Dependent_name	Sex	Bdate	
112233	Hala Saied Ali	F	18/10/1970	
223344	Ahmed Kamel Shawki	M	27/3/1998	
223344	Mona Adel Mohamed	F	25/4/1975	
321654	Ramy Amr Omran	M	26/1/1990	
321654	Omar Amr Omran	M	30/3/1993	
321654	Sanaa Gawish	F	16/5/1973	
512463	Sara Edward	F	15/9/2001	
512463	Nora Ghaly	F	22/6/1976	

Note: In PostgreSQL: when referring to a two word column like "MGRStart Date", the name should be put between double quotations and make sure that capitalization is similar to the actual column name because anything put between quotations is case sensitive.

#### **Data Manipulating Language:**

- 1. Insert your personal data to the employee table as a new employee in department number 30, SSN = 102672, Superssn = 112233.
- 2. Insert another employee with, personal data your friend as new employee in department number 30, SSN = 102660, but don't enter any value for salary or supervisor number to him.
- 3. In the department table insert new department called "DEPT IT", with id 100, employee with SSN = 112233 as a manager for this department. The start date for this manager is '1-11-2006'
- 4. Do what is required if you know that: Mrs.Noha Mohamed(SSN=968574) moved to be the manager of the new department (id = 100), and they give you (use your SSN from question1) her position (Dept. 20 manager)
  - a. First try to update her record in the department table
  - b. Update your record to be department 20 manager.
  - c. Update your friend data (entered in question2) to be in your teamwork (supervised by you)
- 5. Unfortunately, the company ended the contract with Mr. Kamel Mohamed (SSN=223344) so try to delete his data from your database in case you know that your friend will be temporarily in his position.
  - Hint: (Check if Mr. Kamel has dependents, works as a department manager, supervises any employees or works in any projects and handle these cases).
- 6. And your salary has been upgraded by 20 percent of its last value.

### Try to create the following Queries:

- 1. Display all the employees Data.
  - Select \*
  - from employee;
- 2. Display the employee First name, last name, Salary and Department number.
- 3. Display all the projects names, locations and the department which is responsible about it.
- 4. If you know that the company policy is to pay an annual commission for each employee with specific percent equals 10% of his/her annual salary. Display each employee full name and his annual commission in an ANNUAL COMM column (alias).
- 5. Display the employees Id, name who earns more than 1000 LE monthly.
- 6. Display the employees Id, name who earns more than 10000 LE annually.
- 7. Display the names and salaries of the female employees

- 8. Display each department id, name which managed by a manager with id equals 968574.
- 9. Display the IDs, names and locations of the pojects which controlled with department 10.