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

**Departments**

|  |  |  |  |
| --- | --- | --- | --- |
| **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 | 6th of October City | Giza | 10 |
| Al Rawdah | 300 | Zaied City | Giza | 10 |
| Al Rowad | 400 | Cairo\_Faiyom Road | Giza | 20 |
| Al Rehab | 500 | Nasr City | Cairo | 30 |
| Pitcho american | 600 | Maady | Cairo | 30 |
| Ebad El Rahman | 700 | Ring Road | Cairo | 20 |

Dependent

|  |  |  |  |
| --- | --- | --- | --- |
| **ESSN** | **Dependent\_name** | **Gender** | **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 |

**\* Try to create the following Queries:**

1. Display all the employees Data.
2. Display the employee First name, last name, Salary and Department number.
3. Display all the projects names, locations and the department number which is responsible about it.
4. If you know that the company policy is to pay an annual commission for each employee which 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. Dispaly the ids, names and locations of the pojects which controled with department 10.
10. Display the Department id, name and id and the name of its manager.
11. Display the name of the departments and the name of the projects under its control.
12. Display the full data about all the dependence associated with the name of the employee they depend on him/her.
13. Display
    1. The name and the gender of the dependence that's gender is Female and depending on Female Employee.
    2. And the male dependence that depends on Male Employee.
14. Display the full data of the employees who is managing any of the company's departments.
15. Display the Id, name and location of the projects in Cairo or Alex city.
16. Display the Projects full data of the projects with a name starts with **"a"** letter.
17. display all the employees in department 30 whose salary from 1000 to 2000 LE monthly
18. Retrieve the names of all employees in department 10 who works more than or equal 10 hours on "AL Rabwah" project.
19. Find the names of the employees who directly supervised with Kamel Mohamed.
20. For each project, list the project name and the total hours (for all employees) spent on that project.
21. Retrieve the names of all employees who work in every project sorted.
22. Display the data of the department which has the smallest employee ID over all employees' ID.
23. For each department, retrieve the department name and the maximum, minimum and average salary of its employees.
24. List the name of all managers who have no dependents.
25. Retrieve a list of employees and the projects they are working on ordered by department and within each department, ordered alphabetically by last name, first name.
26. For each project located in Cairo City, find the project number, project name the controlling department name, the department manager last name, address and birthdate.

**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 super 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 moved to be the manager of the new department (id = 100), and they give your friend her position
   1. First try to update her record in your database.
   2. Update your friend record to be department 20 manager.
5. Unfortunately the company ended the contract with Mr.Kamel Mohamed so try to delete his data from your database, in case you know that you will be temporary in his position.
6. And your salary has been upgraded by 20 precent of its last