

Write SQL statements for the following activities on the COMPANY database

EMPLOYEE

Fname	Minit	Lname	Sen	Bdate	Address	Sex	Salary	Super_ssn	Dno
John	В	Smith	123456789	1965-01-09	731 Fondren, Houston, TX	М	30000	333445555	5
Franklin	T	Wong	333445555	1955-12-08	638 Voss, Houston, TX	М	40000	888665555	5
Alicia	J	Zelaya	999887777	1968-01-19	3321 Castle, Spring, TX	F	25000	987654321	4
Jennifer	S	Wallace	987654321	1941-06-20	291 Berry, Bellaire, TX	F	43000	888665555	4
Ramesh	К	Narayan	666884444	1962-09-15	975 Fire Oak, Humble, TX	М	38000	333445555	5
Joyce	Α	English	453453453	1972-07-31	5631 Rice, Houston, TX	F	25000	333445555	5
Ahmad	٧	Jabbar	987987987	1969-03-29	980 Dallas, Houston, TX	М	25000	987654321	4
James	Ε	Borg	888665555	1937-11-10	450 Stone, Houston, TX	М	55000	NULL	1

DEPARTMENT

Dname	Dnumber	Mgr_ssn	Mgr_start_date	
Research	5	333445555	1988-05-22	
Administration	4	987654321	1995-01-01	
Headquarters	1	888665555	1981-06-19	

DEPT_LOCATIONS

Dnumber	Diocation		
1	Houston		
4	Stafford		
5	Bellaire		
5	Sugarland		
5	Houston		

WORKS_ON

Essn	Pno	Hours	
123456789	1	32.5	
123456789	2	7.5	
666884444	3	40.0	
453453453	1	20.0	
453453453	2	20.0	
333445555	2	10.0	
333445555	3	10.0	
333445555	10	10.0	
333445555	20	10.0	
999887777	30	30.0	
999887777	10	10.0	
987987987	10	35.0	
987987987	30	5.0	
987654321	30	20.0	
987654321	20	15.0	
888665555	20	NULL	

PROJECT

Pname	Pnumber	Plocation	Dnum
ProductX	1	Bellaire	5
ProductY	2	Sugarland	5
ProductZ	3	Houston	5
Computerization	10	Stafford	4
Reorganization	20	Houston	1
Newbenefits	30	Stafford	4

DEPENDENT

Essn	Dependent_name	Sex	Bdate	Relationship
333445555	Alice	F	1986-04-05	Daughter
333445555	Theodore	M	1983-10-25	Son
333445555	Joy	F	1958-05-03	Spouse
987654321	Albner	M	1942-02-28	Spouse
123456789	Michael	M	1988-01-04	Son
123456789	Alice	F	1988-12-30	Daughter
123456789	Elizabeth	F	1967-05-05	Spouse

1. Write all the DML statements in the correct order in order to add the following information into the COMPANY database. Assume all the tables are empty and ALL non-key columns are NULLABLE. Assign random values to keys where required.

Jane Smith (SSN 123456) works for the Research department at the MG Road location. She works in the Research department project named "NextGen Computing" project for 20 hours a week. She has one dependent.



2. Write all the DML statements in the correct order in order to add the following information into the COMPANY database. Assume all the tables are empty and ALL non-key columns are NULLABLE. Assign random values to keys where required.

The Finance department at the Electronics City location has added a new employee named Peter Pan (SSN 3343443). He works on the Finance department project named "Smart Card Implementation" project for 30 hours a week. He has no dependents.

3. Write all the DML statements in the correct order in order to add the following information into the COMPANY database. Assume all the tables are empty and ALL non-key columns are NULLABLE. Assign random values to keys where required.

The Jayanagar location of the IT department at has added a new employee named Simon Tan (SSN 97868565). He works on the IT department project named "HR Automation" project for 40 hours a week. He has two dependents.

- 4. Display the SSN, Dno and Salary of all the employees. The result should sorted by Dno and salary.
- 5. List the names of all the departments whose manager was hired in the year 1988.
- 6. Display the names of projects that Joyce English is working on.
- 7. Display the name of the employee along with the employee's salary and the supervisor's salary. (Do NOT use nested queries)
- 8. Display the names of all the employees who are on "bench" (i.e., who are not working on any project).
- 9. Display the name of the project and the number of people assigned to the project. Note that the list should include the name of the project even if there is no one assigned to the project.
- 10. Display the ESSN of the employee who has clocked the maximum project hours.
- 11. Display the SSN, Dno and Salary of all the female employees. The result should sorted by Dno and salary.
- 12. List the names of all the dependents whose relationship is 'daughter'.
- 13. Display the names of dependents of Franklin Wong.
- 14. Display the ESSN of the employee who has clocked above average project hours.
- 15. List the names of all the dependents whose relationship is either 'son' or 'daughter'.
- 16. Display the names of departments located in Houston.
- 17. Display the name of the employee along with the employee's salary and the supervisor's date of birth. (Do NOT use nested queries)
- 18. Display the name of the project that has clocked the highest project hours.