Sister Nivedita University

Department of Computer Science and Engineering

DATABASE MANAGEMENT SYSTEM LAB

ASSIGNMENT 5

Create the following table with appropriate constraints:

EMPLOYEE (FNAME, MINIT, LNAME, SSN, BDATE, ADDRESS, SEX,

SALARY,#SUPERSSN, #DNO)

DEPARTMENT (DNAME, DNUMBER, #MGRSSN, MGRSTARTDATE)

DEPT_LOCATIONS (#DNUMBER, DLOCATION)

PROJECT (PNAME, PNUMBER, PLOCATION, #DNUM)

WORKS_ON (#ESSN, #PNO, HOURS)

EMPLOYEE:

FNAME	MINIT	LNAME	SSN	BDATE	ADDRESS	SEX	SALARY	SUPERSSN	DNO
John	B	Smith	123456789	09-JAN-95	731 Fondren,Houston,TX	M	30000	333445555	5
Alicia	J	Zelaya	999887777	19-JUL-51	3321 Castle,Spring,TX	F	25000	987654321	4
Jennifer	S	Wallace	987654321	20-JUN-41	291 Berry,bellaire,TX	F	43000	888665555	4
Ramesh	K	Narayan	666884444	15-SEP-62	975 Fire Oak,Humble,TX	M	38000	333445555	5
Joyce	A	Bond	453453453	31-JUL-63	5631 Rice,Houston,TX	F	25000	333445555	5
Ahmad	V	Jabbar	333445555	29-MAR-69	980 Dallas,Houston,TX	M	25000	987654321	4
James	E	Bong	888665555	10-NOV-56	450 Stone,Houston,TX	M	55000	987654321	1

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DEPARTMENT

DNAME	DNUMBER	MGRSSN	MGRSTARTDATE
Administration	4	987654321	01-JAN-95
Headquarters	1	888665555	19-JUN-81
Research	5	333445555	22-MAY-88

WORKS_ON

ESSN	PNO	HOURS
123456789	1	33
123456789	2	8
666884444	3	40
453453453	1	20
453453453	2	20
333445555	2	10
333445555	3	10
333445555	10	10
333445555	20	10
999887777	30	30
999887777	10	10
987654321	30	20
987654321	20	15
666884444	10	35
666884444	30	5
123456789	3	30

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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
987654321	Abner	M	28-FEB-42	SPOUSE
123456789	Michael	M	04-JAN-88	SON
123456789	Alice	F	30-DEC-88	DAUGHTER
123456789	Elizabeth	F	05-MAY-67	SPOUSE
999887777	Alice	F	05-APR-86	DAUGHTER
666884444	Theodore	M	25-OCT-83	SON
453453453	Joy	F	03-MAY-58	SPOUSE
999887777	Alice	F	05-APR-86	DAUGHTER
666884444	Theodore	M	25-OCT-83	SON
453453453	Joy	F	03-MAY-58	SPOUSE
987654321	Abner	M	28-FEB-42	SPOUSE
123456789	Michael	M	04-JAN-88	SON
123456789	Alice	F	30-DEC-88	DAUGHTER
123456789	Elizabeth	F	05-MAY-67	SPOUSE

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DEPT_LOCATIONS:

DNUMBER	DLOCATION
1	Houston
4	Stafford
5	Bellaire
5	Sugarland
5	Houston

For the above schema, perform the following query—

1. For every project located in 'Stafford', list the project number, the controlling department number, and the department manager's last name, address, and birth date.

2. Retrieve the name of each employee who works on all *the* projects controlled by department number 5.

3. Make a list of all project numbers for projects that involve an employee whose last name is 'Smith', either as a worker or as a manager of the department that controls the project.

4. Retrieve the names of employees who have no dependents.

5. List the names of managers who have at least one dependent.

6. For each employee, retrieve the employee's first and last name and the first and last name of his or her immediate supervisor.

7. Show the resulting salaries if every employee working on the 'ProductX' project is given a 10 percent raise.

8. 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.

9. Retrieve the names of all employees who do not have supervisors.

10. Retrieve the name of each employee who has a dependent with the same last name as the employee.

11. Retrieve the social security numbers of all employees who work on project numbers 1,2.

12. Returns the names of employees whose salary is greater than the salary of all the employees in department 5:

13. Find the sum of the salaries of all employees, the maximum salary, the minimum salary, and the average salary. 14. Find the sum of the salaries of all employees of the 'Research' department, as well as the maximum salary, the minimum salary, and the average salary in this department.

15. Retrieve the names of all employees who have two or more dependents.

16. Count the *total* number of employees whose salaries exceed $40,000 in each department, but only for departments where more than five employees work.

17. For each project, retrieve the project number, the project name, and the number of employees who work on that project.

18. For each project on *which more than two employees work,* retrieve the project number, the project name, and the number of employees who work on the project.

19. For each project, retrieve the project number, the project name, and the number of employees from department 5 who work on the project.

20. For each department that has more than five employees, retrieve the department number and the number of its employees who are making more than $40,000.