# Homework3-cs460

## Lu Ye

1. List all attributes of the employees from department 5.

### Query:

select \* from mccann.employee where dno=5;

#### Answer:

FNAME	M LNAME	SSN	BDATE	ADDRESS S	
SALARY	SUPERSSN	DNO			-
John 30000	B Smith 333445555	123456789 5	09-JAN-55	731 Fondren, Houston, TX	М
Franklin 40000	T Wong 888665555	333445555 5	08-DEC-45	638 Voss, Houston, TX	М
	K Narayan 333445555	666884444 5	15-SEP-52	975 Fire Oak, Humble, TX	М
FNAME	M LNAME	SSN	BDATE	ADDRESS	s
SALARY	SUPERSSN	DNO			-
Joyce 25000	A English 333445555	453453453 5	31-JUL-62	5631 Rice, Houston, TX	F

2. What are the SSNs of the employees working on proposal #10? Sort the result in descending order.

### Query:

select ssn from mccann.employee, mccann.works\_on where works\_on.essn = employee.ssn and pno=10 order by ssn desc;

Answer:

# SSN

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999887777

987987987

333445555

3. What is the Cartesian Product of the employees' first names and the dependents' names? List each pair of names only once in the result.

## Query:

select distinct fname, dependent\_name from mccann.employee, mccann.dependent;

Answer:

FNAME	DEPENDENT_		
John	Michael		
John	Theodore		
John	Abner		
Alicia	Elizabeth		
Alicia	Abner		
Jennifer	Elizabeth		
Jennifer	Theodore		
Joyce	Alice		
Ahmed	Joy		
James	Alice		
John	Alice		
FNAME	DEPENDENT_		
Franklin	Elizabeth		
Jennifer	Michael		
Franklin	Michael		
Ramesh	Alice		
Joyce	Elizabeth		
Joyce	Michael		
Ahmed	Alice		
Ahmed	Elizabeth		
Ahmed	Theodore		
Ahmed	Abner		
Joyce	Joy		
FNAME	DEPENDENT_		
James	Elizabeth		
James	Joy		
James	Abner		
Franklin	Alice		
Alicia	Alice		
Alicia	Theodore		
Jennifer	Abner		
Ramesh	Theodore		
James	Theodore		
John	Elizabeth		
Franklin	Abner		
FNAME	DEPENDENT_		
Jennifer	Alice		
Ramesh	Joy		
Alicia	Joy		
Ramesh	Michael		
Ramesh	Abner		
Joyce	Theodore		
James	Michael		
John	Joy		
Franklin	Joy		
Franklin	Theodore		
Alicia	Michael		
FNAME	DEPENDENT_		
Jennifer	Joy		
Ramesh	Elizabeth		
Joyce	Abner		
Ahmed	Michael		

48 rows selected.

4. At which locations is the research department located? Query: select dlocation from mccann.dept\_locations where dnumber in (select dnumber from mccann.department where dname='Research'); Answer: DLOCATION Houston Sugarland Bellaire 5. What is the full name of the employee who has the largest salary? Query: select fname, minit, lname from mccann.employee where salary in (select max(salary) from mccann.employee); Answer: FNAME M LNAME James E Borg 6. What are the names of the departments with employees who have a dependent named Alice? Query: select dname from mccann.department, (select dno from mccann.employee,(select essn from mccann.dependent where dependent\_name='Alice') where ssn=essn) where dnumber = dno; Answer: DNAME Research Research

7. Retrieve the SSNs of the employees who work in department 5 or who directly supervise an employee in department 5.

Query:				
select ssn from mccann.employee where dno='5'				
union				
select ssn from mccann.employee where ssn in (select superssn from mccann.employee where dno='5');				
Answer:				
SSN  123456789 333445555 453453453 666884444 888665555				
8. What are the birthdates of the managers of the departments with projects from Stafford? (Note the				
wording change from Homework #2.)				
Query:				
select bdate from mccann.employee				
where ssn in(select mgrssn				
from mccann.department				
where dnumber in (select dnum from mccann.project where plocation='Stafford'));				
Answer:  BDATE 20-JUN-31				
9. For each employee, retrieve his/her full name and the full name of his/her immediate supervisor.				
Query:				
select distinct fname,minit,lname,t1,t2,t3				
from mccann.employee, (select fname as t1, minit as t2,lname as t3, ssn as mssn from				
mccann.employee)				
where mssn=superssn				
union select fname,minit,lname,null,null,null from mccann.employee where superssn is null;				
Answer:				

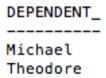
FNAME	М	LNAME	F	М	L
	-			-	
Ahmed	٧	Jabbar	Jennifer	S	Wallace
Alicia	J	Zelaya	Jennifer	s	Wallace
Franklin	Т	Wong	James	Ε	Borg
James	Ε	Borg			
Jennifer	s	Wallace	James	Ε	Borg
John	В	Smith	Franklin	Т	Wong
Joyce	Α	English	Franklin	Т	Wong
Ramesh	Κ	Narayan	Franklin	Т	Wong

10. What are the names of the male dependents who are dependent on a male employee?

#### Query:

select dependent\_name from mccann.dependent where sex='M' and essn in (select ssn from mccann.employee where sex='M');

Answer:

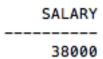


11. What are the salaries of the employees from department 5 who are NOT working on ProductY?

### Query:

select salary from mccann.employee where ssn in(select essn from mccann.works\_on minus select essn from mccann.works\_on where pno in (select pnumber from mccann.project where pname='ProductY')) and dno=5:

Answer:



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

## Query:

select pnumber,pname,numOfEm from mccann.project,

(select pno, count(\*) as numOfEm from mccann.works\_on group by pno having count(pno) >2) where pnumber=pno;

### Answer:

PNUMBER	PNAME	NUMOFEM
30	Newbenefits	3
2	ProductY	3
20	Reorganization	3
10	Computerization	3

13. What are the names of the departments which employ all genders?

# Query:

select dname from mccann.department where dnumber in

(select dno

from mccann.employee,(select sex as s, dno as no from mccann.employee)

where sex='M' and s='F' and dno=no

);

Answer:

# DNAME

Administration Research