# ENSF 608 F21 - Lab 8 Practice Query Answers

Which projects are located in Houston?

```
SELECT pname FROM project WHERE plocation = 'Houston';
```

>    ProductZ
>    Reorganization

Which employees are assigned to the Houston projects?

```
SELECT E.fname, E.lname FROM employee AS E, project AS P, works_on AS W WHERE
P.plocation = 'Houston' AND P.pnumber = W.pno AND W.essn = E.ssn;
```

>    Franklin Wong
>    Ramesh Narayan
>    Franklin Wong
>    James Borg
>    Jennifer Wallace

*If you only want the distinct names, add DISTINCT after SELECT

Note that if you assume that all project/employee locations match their department locations, that each department has a unique location, and that all employees in Houston are working on Houston projects, you could also use the department location and employee assignments instead. HOWEVER, that does not work here, because some of the employees are working on Houston projects even though they belong to other departments, and vice versa. There are also multiple departments located in Houston. Try it and see how the results are different- this query will retrieve all employees assigned to Research departments rather than Houston projects.

```
SELECT E.fname, E.lname FROM employee AS E, dept_locations AS L WHERE
L.dlocation = 'Houston' AND L.dnumber = E.dno;
```

>    James Borg
>    John Smith
>    Franklin Wong
>    Joyce English
>    Ramesh Narayan

For the dependent named Elizabeth, what is her spouse's name and birthdate?

```
SELECT E.bdate, E.fname, E.lname FROM dependent AS D, employee AS E WHERE
E.ssn = D.essn AND D.dependent_name = Elizabeth;
```

>    1965-01-09     John Smith

What is the salary and name of the Research department manager?

```
SELECT E.salary, E. fname, E.lname FROM employee AS E, department AS D WHERE
D.mgrssn = E.ssn AND D.dname = 'Research';
```

    40000.00       Franklin       Wong

How would you retrieve all the employee SSNs who work in a Bellaire department?

> We can't! We only know which department each employee works in- in this case, the only department in Bellaire is #5 Research, but there are also other research departments in other locations.

Retrieve the name, relationship, and birthdate for any dependent(s) of employee Franklin Wong. Then rewrite the query to save these dependents into a new table.

```
SELECT D.dependent_name, D.bdate, D.relationship FROM dependent AS D,
employee AS E WHERE E.lname = 'Wong' AND E.ssn = D.essn;
```

      Alice          1986-04-04     Daughter

      Joy            1958-05-03     Spouse

      Theodore   1983-10-25     Son

```
CREATE TABLE wong_dependents AS (SELECT D.* FROM dependent AS D, employee AS
E WHERE E.lname = 'Wong' AND E.ssn = D.essn);
```

What is the impact of deleting Franklin Wong from the database?

We would need to cascade the modification across multiple tables- any employees supervised by Franklin would need to be assigned new supervisors, his department would need a new manager, any projects that he works on would need to be removed from the Works_On table and his dependents would also need to be removed.

Update the location of department #1 to Calgary.

```
UPDATE dept_locations SET dlocation = 'Calgary' WHERE dnumber = 1;
```

Consider what you would need to do if you also had to update the project locations for department 1. The location of the Reorganization project would also need to be updated.