Group Subquery

For this assignment, make sure that you are comfortable with subqueries before you get started. For subqueries, we don't want to do a search on IDs because this is not any kind of meaningful information that anyone can remember. We can remember names and descriptions. For example when it comes to candidate and parties, we don't know about party codes 1 or 2 but we know republican and democrat. This means that in our search we should look for those and allow the subquery to figure out the codes

as in the following example
select .. from student where ... (select .. from student_classes where ... (select .. from classes where class_desc='operating systems'))

Notice in the above example, I am not putting in the code for the operating system class but rather I allow the subquery to figure it out. Please be sure to visit the subquery video and chapter.

1) I don't understand question #4
   Create a second table called candidate2 that contains all the data from the candidate table using create table as… statement. The new table should contain only the first name, lastname and the salary, lowered by 10% for all the candidates who are Republicans

   A: The basic format of the SQL statement is
   Create table … as select … from … where ,,,

   Between the select and from you want to display first name, lastname and the salary, lowered by 10%. How do you lower it by 10%?

   Let's say your number is 100

   100 * .90 = 90

   or

   100 - (100*.10)=90

   Why does it need to be a subquery? Because you are displaying information from the candidate table but filtering the rows based on the party description which appears in the party table.

2) How do you get a hold of all the candidates whose name contains the letter n and are democrats.
   A: select fname, lname, party_id as democrat from candidate where party_id in (select party_id from candidate where id=1 and upper(lname) like '%N')

The above solution is not what you want. Approach the problem in this way:

We need both tables (candidate and party table). The candidate table contains the names and the party table contains the descriptions. We are displaying names. The outer select statement is responsible for displaying. This would mean that the outer query will display the names which come from the candidate table. We are interested in those whose name starts with n, so here we have the filtering criteria which is the where clause. There is another filtering criteria which is democrats but this is in another table. This is where the subquery comes in so the basic structure looks like this

select ... from candidate where lname like ... and party_id = (select ... from ... where search for democrat)