CS327E Lecture 6 - Wednesday 2/10/2016

Reading Quiz

Q1: Ans = C
Q2: Ans = D
Q3: Ans = C
Q4: Ans = D
Q5: Ans = D

Concept Questions

1. Recall our retail store database. It keeps product details in the SKU_Data table that is shown below. How can we find out the number of different departments that have a product in this table?
    a. You'll be including duplicate values.
    b. You'll be including duplicate values again.
    c. You'll still be including duplicate values.
    d. This is the correct answer because you are filtering out the duplicates and you're also including the nulls.
    e. This is not the correct answer.

2. We have the same SKU_Data table as before. Now we want to generate a more user-friendly report that shows the name of each department along with the number of products it sells.
    a. This is the correct answer because we will be getting counts for the null departments and getting the null groups.
    b. We are not using a group by statement here.
    c. We are still not using a group by statement here.
    d. This is not the correct answer because group by includes null groups. However when we say COUNT(DEPARTMENT) it's expecting a value for the Department, then we're going to get a NULL group, but the count is going to be zero.
    e. This is not the correct answer

    The takeaway message here is that if you **want** to include **null** groups, make sure to use **COUNT(*)**

3. We want to extend the previous report to include the SKU_Description field. That is, we would like to display the SKU_Description alongside the department name while still grouping by department. Can this be done with a select-from-group-by query?
    a. This is not the correct answer because you will get random records since you don't know what to distinguish by.
    b. This is not the correct answer because you will get random records since you don't know what to distinguish by.
    c. This is not the correct answer because you will get random records since you don't know what to distinguish by.
    d. This is the correct answer.

4. What's wrong with this query?
    a. The max of a date is actually fine, it just means the latest date.
    b. The USING keyword is fine, since it is called bug_id in both tables.
    c. There is nothing wrong with the GROUP BY, since we want to group by product_id.
    d. This is the correct answer because you will give back a random bug_id, since there is a one to many relationship.
    e. This is not the correct answer.

5. How can we fix this query to include the products that have no bugs?
    a. No, because the junction table only includes pairs that have relationships.
    b. No, because the junction table only includes pairs that have relationships.
    c. No, because the junction table only includes pairs that have relationships.
    d. No, because the junction table only includes pairs that have relationships.
    e. This is the correct answer because we will be actually going to the products table and making a left outer join.

6. We have a table of test results. Each test can have several steps and the table tracks the progress of the testing by providing a completion date for each step in the test. How can we find those tests that are **completed**?
    a. This is the correct answer because we are filtering out nulls in the completion date field and getting the test_name.
    b. This is not the correct answer because we are doing the filtering out first through WHERE, thus pulling out completion_date that have nulls before we are actually doing the group by. As a result, we are including the NULL value tests.
    c. This is incorrect because we are grouping by test_step.
    d. This is incorrect because we are grouping by test_step.