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| **CIS355 HOMEWORK 9: More Queries!** |

* Use **AdventureWorks2012** for this assignment. This is a large, normalized sample database from Microsoft. It is not case sensitive, so capitalization of table names, column names, and alphanumeric data does not matter.
* You will have to understand the data (both meta-data & raw/end user data) to write good queries, so be curious, experiment, & use the “Object Explorer” as needed.
* All columns should have meaningful names.
* State any assumptions you make, where it is unclear exactly what the user is asking for.
* Refer to the following Database Diagram (part of the PRODUCTION schema).



**Answer the following questions. You can copy & paste the rest of this document into SQL Server Management Studio, to make it easier to work on the queries. Please copy and paste yours queries/answers back into a Word document to submit on Canvas, to make it easier to grade.**

USE AdventureWorks2012

/\* 1. A user asks for information about finished goods that are not black or blue. You know the user is

only interested in “active” products (not discontinued products or products AdventureWorks no longer sells), even though the user doesn’t specifically say this. You start with the following query: \*/

SELECT Name, ProductNumber, Color, Size, [Weight], ListPrice

FROM Production.Product

WHERE Color NOT IN ('black', 'blue')

AND DiscontinuedDate IS NULL AND SellEndDate IS NULL

AND FinishedGoodsFlag = 1

/\* The above query returns 88 products, but you notice that there are some products,

like handlebars, that should be listed because they are not black or blue (they don't

have a color) and they meet the other WHERE clause conditions. Why aren't they

showing up in the result? Modify the query so that they do, and show the revised

SELECT statement.\*/

/\* 2. What is the minimum and maximum cost for (active) finished goods,

by product line? (Note: Users don't consider NULL to be a product line.)

Show the SELECT statement. \*/

/\* 3. How would you modify your answer to the previous question if the user

wants the results sorted by the maximum cost, from most to least expensive, and

the user only wants to see product lines with minimum cost over $1. Show the

revised SELECT statement.\*/

/\* 4. How many "inactive" products are in the product table? Show the SELECT statement.\*/

/\* 5. A user asks you for information about product reviews. For each review, she wants to see

the product's number and name and the reviewer's name, review date, rating, and comments.

Show the SELECT statement.\*/

/\* 6. The first step in processing a join is to generate the Cartesian product

of the two tables. If the Product table has 25 columns and 505 rows, and the

ProductReview table has 8 columns and 4 rows, how many columns and rows will

the Cartesian product have?\*/

/\* 7. The user wants to see which products in the mountain bike product line

do NOT have any reviews. Show the SELECT statement.\*/

/\* 8. What is the total quantity in stock for each (active) product,

sorted alphabetically by product name? Show the SELECT statement.

Note: A product may be stocked in many inventory locations,

so you need to involve the ProductInventory table in your query.\*/

/\* 9. The purchasing clerk wants to know which products need to be re-ordered.

Show the SELECT statement. Note: A product needs to be reordered if the total

quantity, across all inventory locations, is less than the product's reorder point. \*/

/\* 10. Write your own user question, and then show the SELECT statement

that answers it.\*/