**Unit 3 Graded Exercise 4**

The following questions come from the “Check your understanding” examples of each section of Chapter 11 & 12 in your textbook.

After you are finished, please submit a Microsoft Word file that contains screenshots of the SQL Queries, the output, and put a comment line in the query with your last name. Your document should be named **U3\_GuidedPractice4\_Lastname.docx**.

(11-3) Question 1:

Table *sec1103* contains two columns, *row\_ID* and *num\_1*. (It also contains a column named *num\_2*, but we are not going to use that column now.) Find the minimum and maximum values of the *num\_1* column. Name these values “minimum” and “maximum.”

(11-4)Question 2:

Repeat the exercise in the previous section, except this time add a *where* clause that limits the *row\_ID* column to values less than 8. Is there any change in the minimum and maximum values?

(11-6) Question 3:

In table *sec1106*, find the following information:

■ The number of rows in the table

■ The number of rows that have a non-null value in the *Num\_1* column

■ The number of rows that have a null value in the *Num\_1* column

(11-9) Question 4:

In table *sec1103*, find the number of distinct values in the *num\_1* and *num\_2* columns, taken together.

(11-11) Question 5:

In table *sec1103*, show the problem with nulls in addition and how to solve it.

1. Add columns *num\_1* and *num\_2*, adding each row first.

2. Add columns *num\_1* and *num\_2*, adding each column first.

3. Add columns *num\_1* and *num\_2*, changing all the nulls to zeros first.

(12-2) Question 6:

Table *sec1202* has four columns: *row\_id, col\_1, col\_2,* and *col\_3*. Write a select statement that groups the rows by the value in *col\_1* and for each group determines the sum of the values in *col\_3*.

(12-4) Question 7:

Use table *sec1202*. Write a select statement that groups the rows by the value in *col\_1* and *col\_2*. For each group determine the sum of the values in *col\_3*.

(12-7) Question 8:

Suppose you wanted to show all the data in table *sec1202* and you also wanted to show the total for *col\_3*. Could you do this with SQL?

The answer is no. The best you can do is to run two queries. One would show the data with:

*select \**

from *sec1202;*

The other would show the total with:

select *sum(col\_3)* as *grand\_total*

from *sec1202;*

Then, if you were desperate, you could paste the two pieces of paper together. Or you could do the same thing in SQL using a union.

Fortunately, most SQL products give you a better way. There is usually some sort of report level to the software that will do totals and subtotals for you.

(11-11) Question 9:

Table *sec1211* has three columns: *row\_id,* *col\_1*, and *col\_2*. Group on *col\_1* and get the sum of *col\_2*. Add a having clause to show only the rows of the result table where the sum is greater than 20.