MIS 420 T-SQL #1

Table

Description automatically generatedWrite your answers to the following questions on this document, and upload this document for grading. Currently the AdventureWorksDW2014 database is on CB-OT-DEVST06.AD.WSU.EDU. You can access it with userID = mfstudent, Password = BIanalyst007. Please review Page 9 of Module 2 documentation #1 to identify which fields from the FactResellerSales table are to be counted, summed, or averaged. In general you can count any column (as its counting rows), revenue is in the SalesAmount column, and units are in the Quantity column. The first document of the warm-up module shows the data model.  
  
Calculate all values using measure fields from the Fact tables, and textual descriptors from the dimension tables. The dimension tables used are dimReseller, dimGeography and the fact table is FactResellerSales. If you see numbers in the dimension tables, its best not to use these numbers, the convention is to use numbers from transaction tables.

*Chart

Description automatically generatedGraphical user interface, text

Description automatically generatedNote*: each row of the factReseller table represents one row on an invoice, and has a SalesOrderLineNumber. So the data does not easily provide totals by invoice# (aka SalesOrderNumber) In the image to the left you can see that the SalesOrderNumber is repeated. To grab the invoice number just once (for example to count invoices, or calculate an average by invoice) be sure to use COUNT(DISTINCT([column])) to grab one unique instance from a column that has repeating values. Please review Page 9 of Module 2 documentation #1 for further information.

1. A) What is the name of the Reseller that had the highest Dollar Sales Amount (highest total sales - use a GROUP BY query of the SalesAmount column) calculated from the FactReseller table?   
   For this reseller  
   B) What is their city, state, country location? (Figure out city),   
   C) What was the grand total in dollars?   
   D) What kind of business are they/ Bike shop? Warehouse store? Or Value Added Reseller?   
   E) For this reseller what is the average $ amount of an invoice (use the SalesAmount column)?   
   F) What is their average # units purchased (use the OrderQty column)?  
     
   A- Brakes & Gears

B- United States, Utah, Tooele

C- 877107.1923

D- Value Added Reseller

E- 73092.266

F- 129

1. A) What is the name of the Reseller that had the highest average # line items per invoice? (this is similar to the number of items on a receipt at Walmart – count the items of the SalesOrderLineNumber column, and divide that by the number of invoices – this is demonstrated on pg. 9 of module 2.  
     
   B) What is their city, state, Country location?   
   C) What was the grand total in dollars?   
   D) How many invoices?  
   E) what kind of business are they/ Bike shop? Warehouse store? Or Value Added Reseller?   
     
   A- Bicycle Merchandise WareHouse
2. USA, California, Santa Monica
3. 354805.2476 total, 22175.3279 average
4. Warehouse

1. A) What is the name of the city that had the highest total sales?   
   B) How many invoices for this city?   
   C) What was the grand total in dollars revenue for this city? (SalesAmount column)  
   D) What is their average # line items per invoice for this city?  
   E) What are the business types for this city? Bike shop? Warehouse store? Value Added Reseller? All?  
     
   A- Toronto

B- 176

C- 4460477.685

D- .4

1. Toronto has all business types
2. A) What is the name of state or province from France that had the highest total sales?   
   B) How many invoices? (Count(Distinct([SalesOrderNumber]))  
   C) What was the grand total in dollars?   
   D) What is their average # line items per invoice   
     
   A- Seine (Paris

B- 53

C- 1452049.4089

D- 1.23

1. Compare the total sales by country.   
   A) If you add the European countries sales together are they greater than the United States?   
   (do this calculation in SQL using an IN statement)  
   B) What countries are in the top 3 based on the grand total?   
   C) What are the total # units sold to American (USA only) resellers?  
   D) what countries have higher numbers than the United States for average # line items per invoice?  
     
   A- NO, USA is 53607801.21, where France, great Britain, and Denmark total 10870534.8

B- USA, France, Great Britian

C- 132748

D- All countries

1. Change to the FactInternetSales table to examine individual customers. Total the sales and units, # Invoices, and Invoice average by City in the United Kingdom.

*Note: Pull the data from the factInternetSales table connecting that to the customers table and then connecting the DimCustomers table to the DimGeography table.*  
  
A) What city has the most commerce?   
B) Record their total units, total revenue, and Average invoice amount.   
C) The sales manager once claimed “London records more invoices than the next 5 UK cities combined!” Is it true?   
  
A- London

B- 1579 units, 802810.2969 total revenue, 1170.28 average invoice amount

C- Yes this is true, London has 686 invoices while the next 5 cities combine to 654