Please Note: You need to go to the Teradata University web site first (http://www.teradatauniversitynetwork.com/) (password= Analytics) and register to create an account. After you have the account then you can access the SAS software.

SAS Warm-up Assignment

SAS Warm-up Assignment consists of two parts. You need to do both parts to complete the SAS Warm-up Assignment. Each part worth 2.5%.

To complete the SAS Warm-up assignment, you will need to access SAS Visual Analytics (VA). How to Access SAS Visual Analytics Tools.pdf

Part 1: Intro to SAS Visual Analytics (2.5%)

Part 1 includes several basic tasks of data exploration within the SAS Visual Analytics (SAS VA) environment. The purpose is to get you started with SAS VA and give you a basic familiarity of how data visualization in SAS VA works.

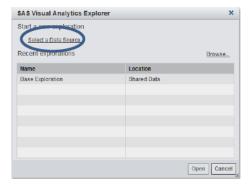
Specific Instructions

First, take a few minutes and review the following video: <u>SAS Visual Analytics: An Overview (6:02)</u>. This will give you an initial understanding of the interface and the most basic tools in SAS VA.

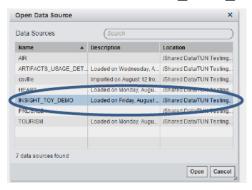
In the next step, click at Data Explorer button:



Then select the data source as follows:



Choose the "INSIGHT_TOY_DEMO" data source and click OPEN:



Once you reach the SAS VA Explorer interface, answer the following questions using the above mentioned data source:

1. Create an automatic chart that shows the Product Cost of Sale by Facility Continent. After you're done, minimize the chart named Visualization 1 and proceed to the next question. Watch the following videos for support:

Create a basic visualization using SAS Visual Analytics Explorer (4:07)

- 2. Create a box plot that shows the Product Cost of Sale by Product Line. After you're done, minimize the chart named Visualization 2 and proceed to the next question.
- 3. Create an automatic chart that shows the Unit Capacity by Transaction Date where the date format is in "Year, Quarter". After you're done, minimize the chart named Visualization 3 and proceed to the next question. Watch the following video for support:

Modify data item properties (7:59)

4. Create a tree map visualization that shows Product Sale by Facility Country. After you're done, minimize the chart named Visualization 4. Watch the following video for support:

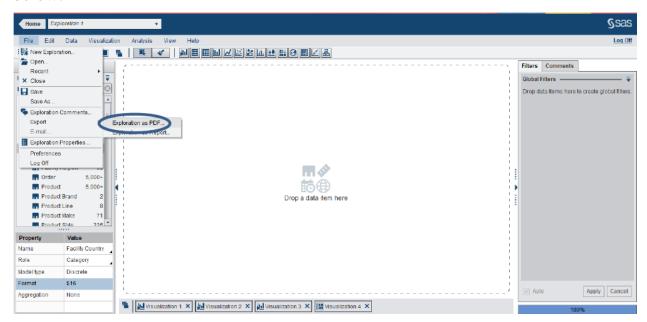
Create a TreeMap visualization (5:38)

- 5. Create a new hierarchy named Hierarchy 1 which has the following hierarchical structure:
 - Facility Continent
 - Facility Country
 - Facility Region
 - o Facility City

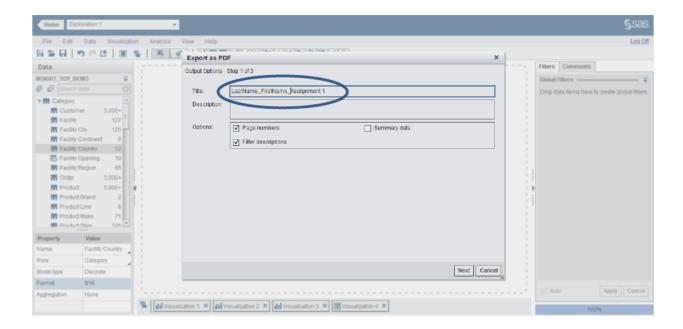
Remark: Consult "SAS Visual Analytics Quickstart Guide" for how to create hierarchies.

6. Create a tree map visualization that shows Product Sale by Hierarch 1. After you're done, minimize the chart named Visualization 5.

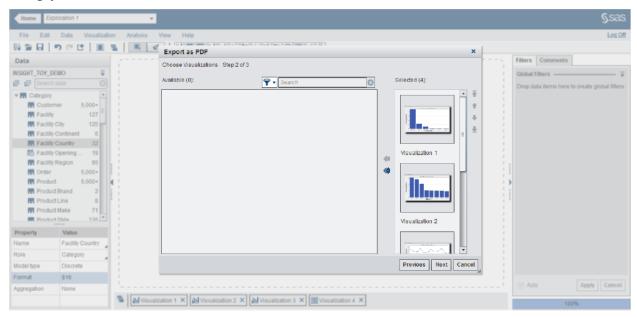
Upon completing all four tasks, export your assignment in PDF format as described below:



Include your Last Name and First Name in the title and make sure that "Filter descriptions" option is selected. Notice that the filter description must be shown below each chart in the PDF file. Then click NEXT:



Drag your results in the consecutive order as shown below and click NEXT:



Your first part is complete. Continue to Part 2 before submission.

Part 2: Choosing Appropriate Visualization (2.5%)

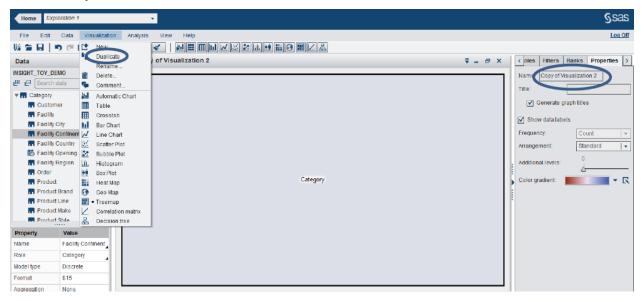
In this part you will learn how to use SAS VA Explorer to answer specific business questions. You will have to decide which visualization tool to use in order to best

answer the questions. Some charts are better than other in conveying specific insights or in providing the desired analytics for your problems.

Note: The main objective of this part is for you to be able to use **local & global filter**. Using Hierarchy is NOT acceptable for this part.

Open the INSIGHT_TOY_DEMO file and answer the following questions:

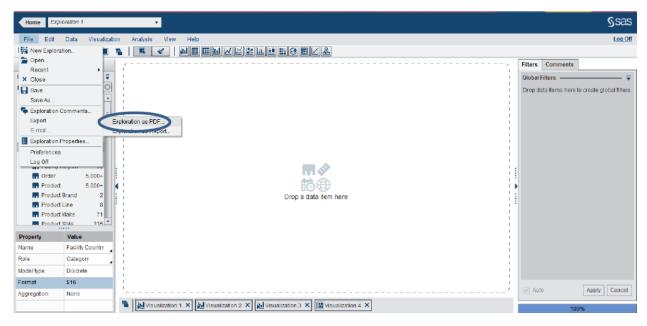
1. What is the product sale for each country in South America? Use at least three types of charts and suggest which one in your opinion works better in answering this question. After you created the first chart, duplicate your chart by clicking **Visualization** → **Duplicate**. Rename your chart as "Visualization 2" and use a different chart to show the answer. Do the same for your third chart. See the screen below for details:



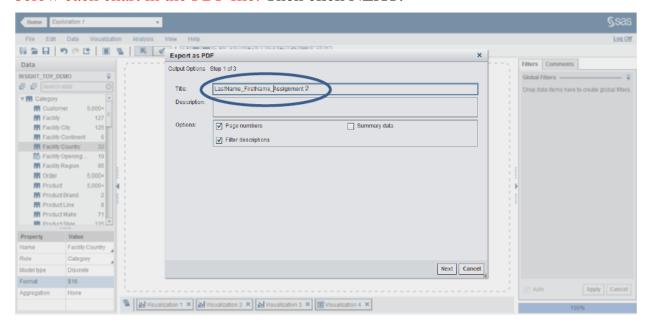
Use the following video for support: <u>Filter data in SAS Visual Analytics Explorer</u> (10:51)

- 2. How much was the product sale of "Kiosk" product line in Vancouver and in Toronto from 2010 till 2012? Use again three different charts to answer this question. Save your three answers using the same process described in the previous question and rename them as "Visualization 4", "Visualization 5" and "Visualization 6".
- 3. In which two months of 2012 the cost of sale was lowest in Atlanta? Use just one chart to answer the question. Save the chart as "Visualization 7".

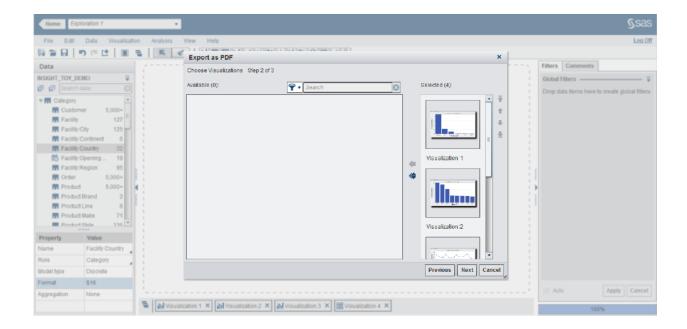
Upon completing all three tasks, export your assignment in PDF format as described below:



Include your Last Name and First Name in the title and make sure that "Filter descriptions" option is selected. Notice that the filter description must be shown below each chart in the PDF file. Then click NEXT:



Drag your results in the consecutive order as shown below and click NEXT:



Your second part is complete.

Submission:

- Compress the files for both part 1 and part 2 into a single ZIP file.
- Submit the ZIP file through Canvas.

Note: You can use Preview Report feature, save it as PDF, and submit through Canvas.

Due Date: [November 13, 11:59 PM].

NOTE: This is individual project