SAS Studio Exercise 02

Utilizing One-Way Frequencies

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**Sources**

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SAS® Studio. Release 5.2

SAS® VIYA® release V.03.05

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# Use Case – One Way Frequencies

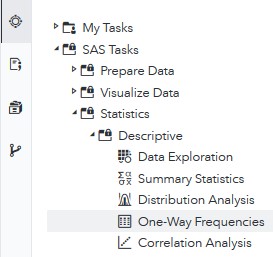
Razorback Stores is a local department store serving a metropolitan area. As a department store, they offer a wide variety of items and services and track sales through a point of sale system. Over the past several months, Razorback Stores performed a marketing campaign designed to promote and incentivize a loyalty program.  Razorback Stores is interested in being more knowledgeable about their customers. More specifically, they want to know the distribution of promotional and regular customers that have shopped at their store. In order to understand this, we will be creating a one-way frequency analysis.

## Step 0: Navigate to SAS Studio/Activate CAS Session

Before jumping into the ***One-Way Frequencies*** task, please refer back to***SAS Studio 01 – Logging into the System*** to understand how to navigate to SAS Studio, activate a CAS session, and manage your data.

We will be using the Razorback Stores dataset which will be provided by your instructor and/or is available on blackboard. Once you have this dataset loaded on SAS Viya, following ***SAS Studio 01 – Logging into the System***tutorial, load this dataset into memory in your personal user folder.

## Step 1: Tasks

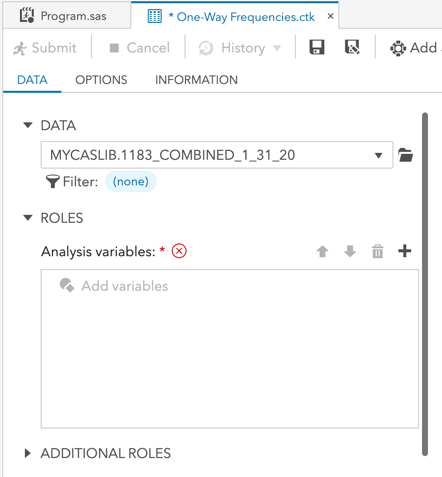


In order to access the **One-Way Frequencies** task within SAS Studio:

1. Click on the **Tasks** icon located on the left-panel
2. Expand the **SAS Tasks** folder
3. Expand the **Statistics** folder
4. Expand the **Descriptive** folder
5. Double click **One-Way Frequencies**

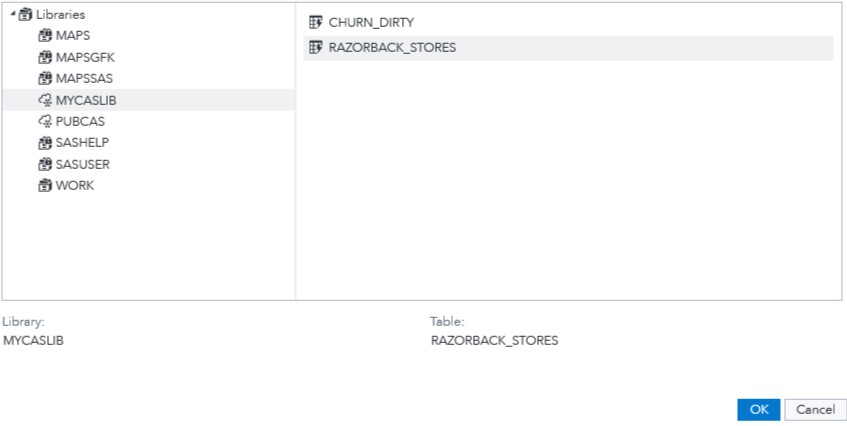
## Step 2: Select Data

Next, you need to select your data. In this case, we will be choosing **Razorback Stores** which can be found in our **User** folder. Under **DATA**,



1. Click on the **folder** icon located at the right of the current dataset in place

A new **Choose a Table** window will open,



1. Click on **Libraries**

A list of all the folders available to you will be displayed.

1. Click on **MYCASLIB** which references your **User** folder

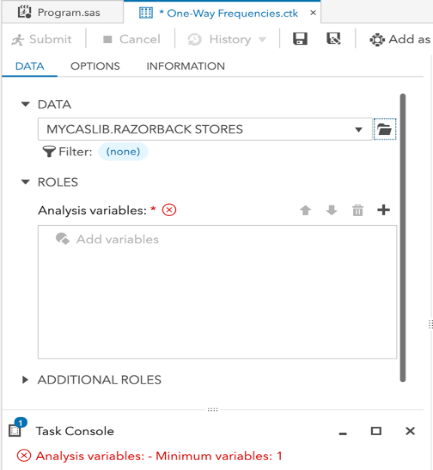
All the different datasets found in your **User** folder will display.

1. Click on **RAZORBACK\_STORES**
2. Click **OK**

## Step 3: Select Variables

Once you have **Razorback Stores** dataset selected, we need to select the variables we want to work with. You will notice red font color text which require you to select a minimum of one variable.

Under **ROLES**,



1. Click on the **+** sign to the right of **Analysis variables**

A new window will open, titled **Column Selection**.



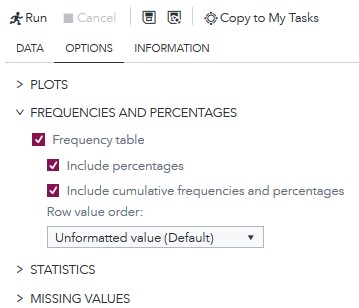
1. Select **Type of Customer**
2. Click **OK**

## Step 4: Modify Settings

One you have selected your dataset and variables,

1. Click the **OPTIONS** tab

Here you may choose settings that would give you the desired outcome. For this scenario, we will keep the default settings:



1. **Frequency Table**: checked
2. **Include Percentages**: checked
3. **Include cumulative frequencies and percentages**: checked

Once you make sure the above are selected,

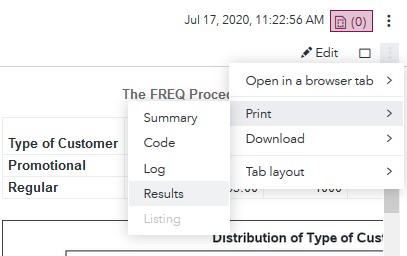
1. Click **Run** to execute the task

Notice that as we have selected a dataset, variables, and checked/unchecked settings, there is a code area on the right side of the screen that has been updating as we modified these.

## Step 5: Results

Once the task has executed, you will have your **One-Way Frequency** to view in the right most pane.

In order to better visualize the results, locate the three dots at the very right end of the screen under the current date and time.



1. Click on these three dots and,
2. Select **Print**
3. Click on **Results**

A full-size screen will appear with the results, alongside a pop-up window that allows you to select where to print it.

1. Alternatively, you can click on the **Maximize preview** icon



A screenshot of a cell phone

Description automatically generatedNotice that you have three visualizations to look at:

Table Format Results:

A screenshot of a social media post

Description automatically generatedDistribution of Type of Customer:

A screenshot of a cell phone

Description automatically generatedCumulative Distribution of Type of Customer:

Congratulations, you have created a One-Way Frequency in SAS Studio!