Shortcuts to Save Time While Working with SAS®

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ABSTRACT

Have you asked to yourself things like these?

- Can I clear the log and output windows with a shortcut?
- How can I review the log faster in an interactive session?
- Is there a button that can do it for me?

If you answered "**Yes"** to at least one of these questions, continue reading…

This paper will give you a list of Shortcuts that will make your experience working with SAS faster, for example:

- How to make your log and output windows clear before you run your program, just by hitting an **F key.**
- How to customize buttons to check your log interactively.
- How to find a specific value on a dataset, without to scroll down for all the variables available, just by using the correct operator in the **where expression**.
- And some other interesting topics that really will help you to save time!

INTRODUCTION

Very often, we are in stressful situations that does not allow us to waste time, we need to act as fast as possible, this paper will give you some tools that make your programming life easier, especially when you are in a hurry.

It is important to mention that these tools will work only when you are running programs in an interactive SAS session.

Let me show you some examples that we will cover on this paper:

- Have you had to re run a code because you did not clear the LOG before?

    o You can clean it hitting an "F" key.

- How can you make sure your LOG is clean?

    o This paper will show you how to do it with a simple "click"

- Which is the way you use to look for all the possible values that a specific VARIABLE has?

    o You can do it quicker if you use the "WHERE – IN" expression.

- Have you used the COMMAND BAR?

    o It is very helpful and simple to use.

CUSTOMIZING YOUR KEYBOARD

You can select the commands that you want SAS performs when you hit and "F" key, or any simple combination of keys (like Ctrl+L).

If you hit "F9" key when you are in your SAS session, you will see a window similar to this:

```
KEYS <DMKEYS>
Key        Definition

F1         help
F2         reshow
F3         end; /*gsubmit buffer=default*/
F4         recall
F5         wpgm
F6         log
F7         output
F8         zoom off;submit
F9         keys
F11        command focus
F12
SHF F1     subtop
SHF F2
SHF F6
```

1. Go to the "F3" line and edit it, to say**: log; clear; output; clear; wpgm; submit;**
2. Then go to the File menu, and select, "Save".
3. Close the "KEYS <DMKEYS" window.
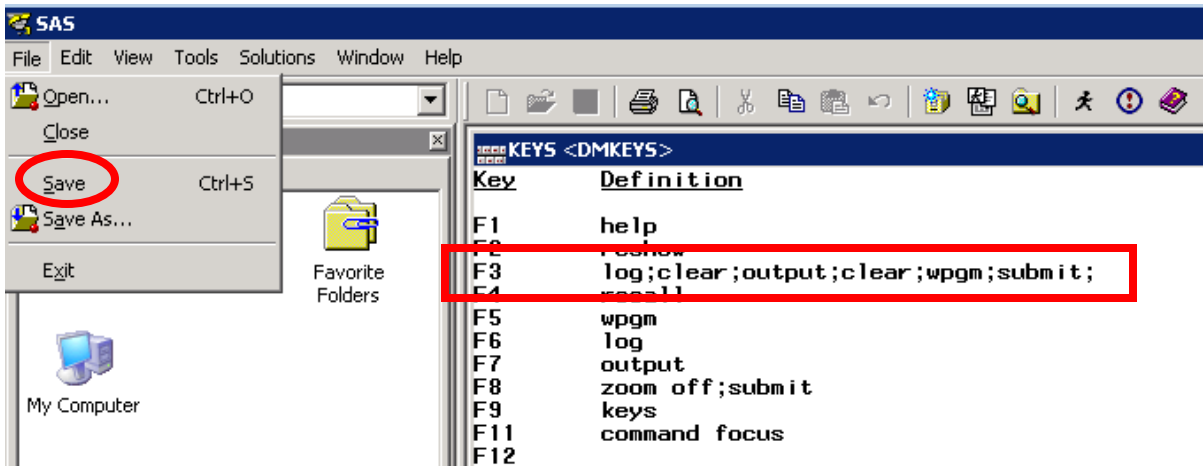
Now go to your program and hit "F3", what do you think it will happen?

Yes… you got it! This simple action, will go to the LOG window and clean it, then will go to the OUTPUT window and clean it, and finally will go to the EDITOR window and submit your program.

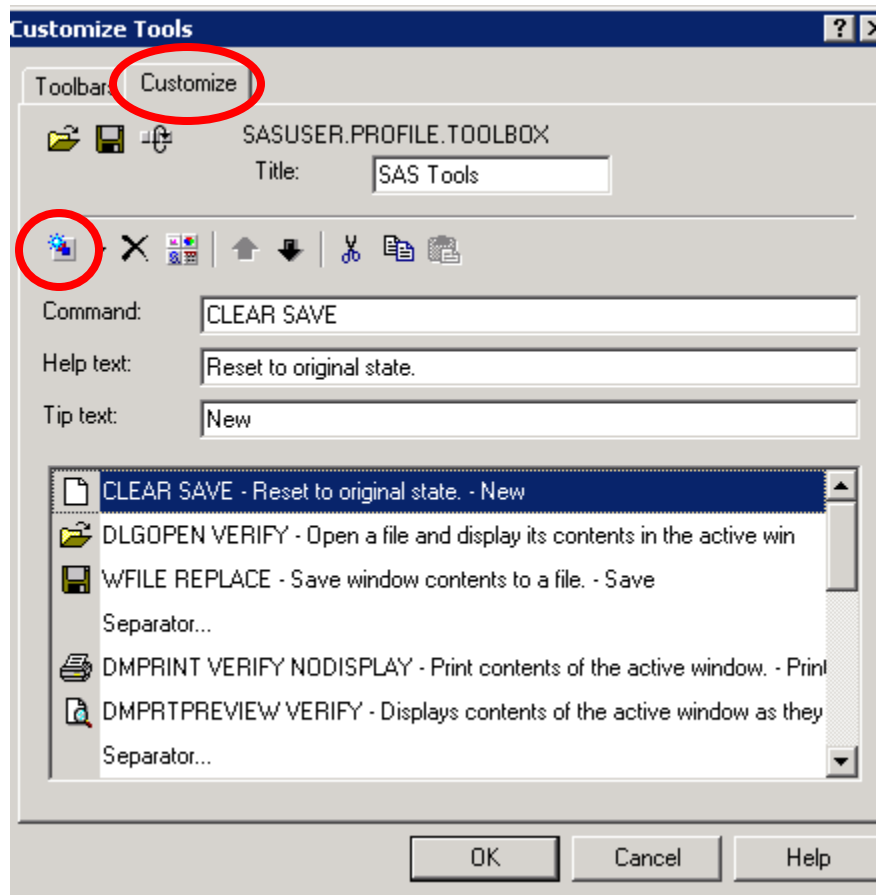So simple right? Let's go to the next tool.

CUSTOMIZE BUTTONS

To make your LOG review easier, you can customize the Application Tool Bar (by adding buttons).
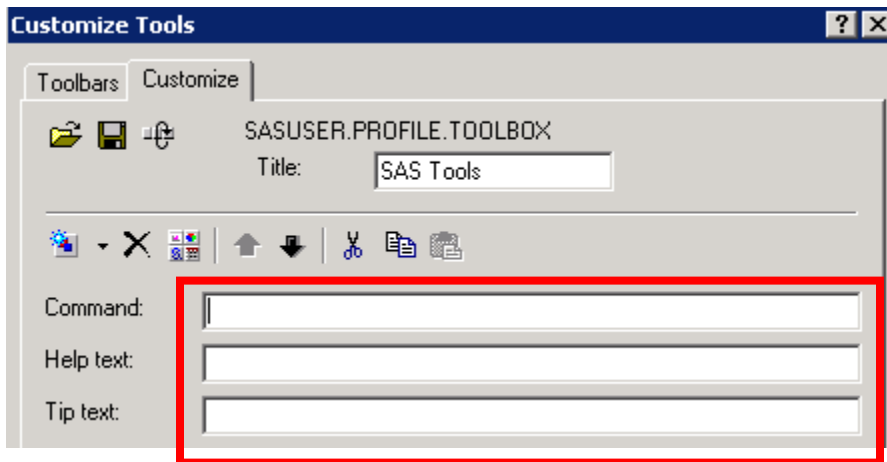
1. Once you are in your LOG window, just go to the Tools menu, then select "Customize"
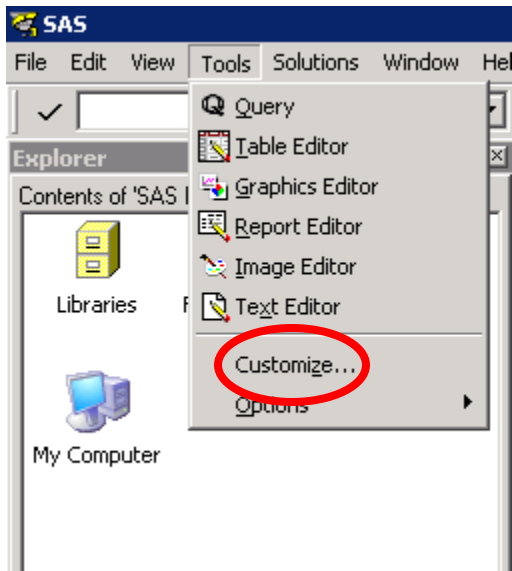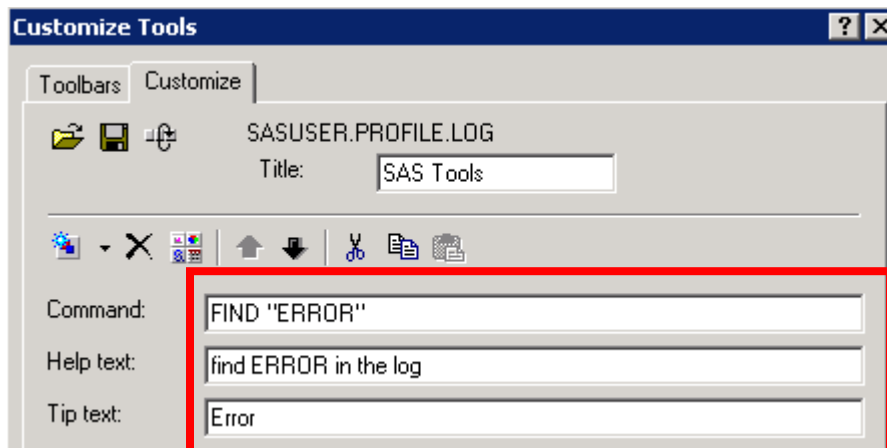
2. In the next window, select the "Customize" tab and select the "Add Tool" button:

3. Then you will see the Command, Help text and Tip text clean to type the command you want to execute when your new button is added.

4. Let's type the command FIND "ERROR", and just put the Help text and Tip text you want to see when the mouse is over you new button.

5. Then go to the "Change icon" button, to select the icon you want your new button has. Once you have selected your desired icon, hit ok in the Bitmap Browser window.
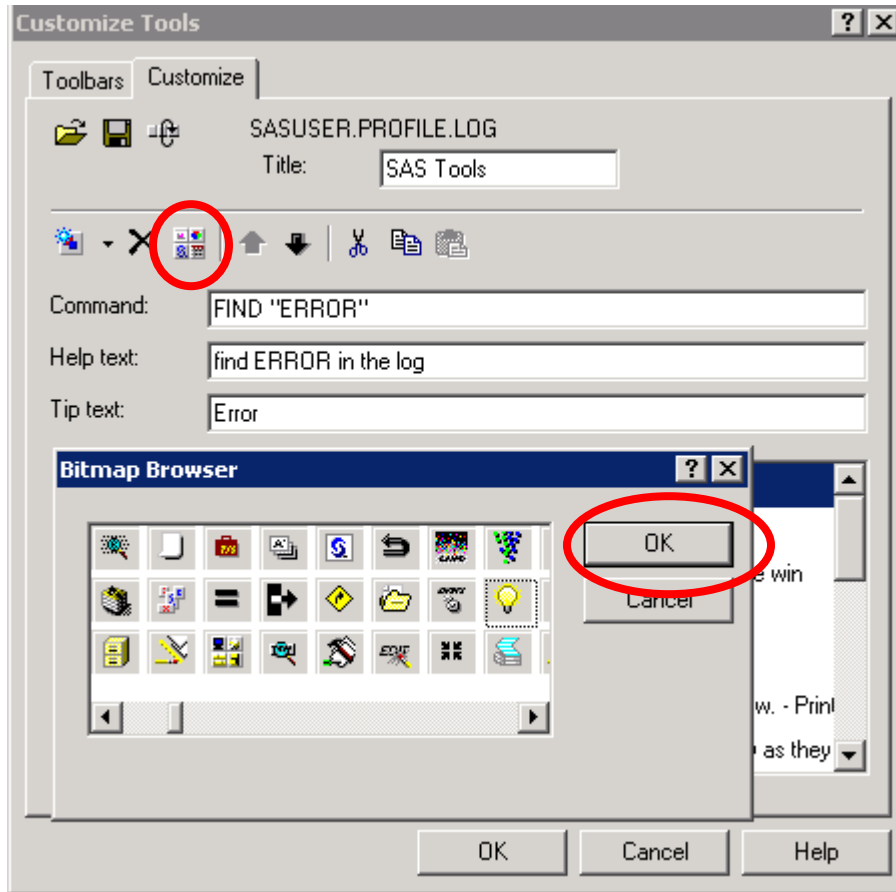
6. You will see your new button-command created and if you want, you can select the position you want it has in the Application Tool Bar, (by using the arows).

   Once you are done with the customization of your buttons, hit the "Save" button.
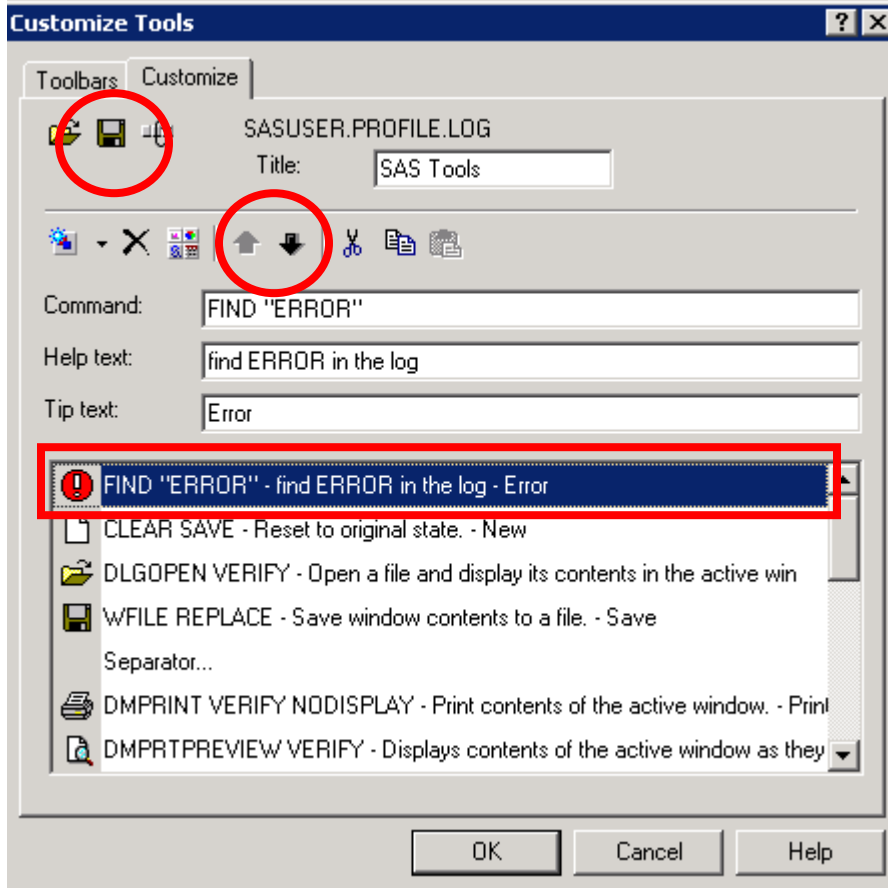
7. ,Finally, check the "Save tools for Log" option in the new window will appear, then hit ok.

8. Now, when you get back to your log window, you will see the new button is added to the Application Tool Bar.

```
Log - (Untitled)
95
96
97    /* this is an example of how the LOG window can be reviewed    */
98    /* when you submit a long piece of code that contains some      */
99    /* prohibited words, that you are not seeing in only one screen  */
100   /* just go to the LOG window and hit CTRL+HOME in your keyboard  */
101   /* then the pointer will be moved at the begining of the LOG text*/
102   /* when you give a click on the button you created, you will see */
103   /* that the pointer will be moved to the line where the word is  */
104
```
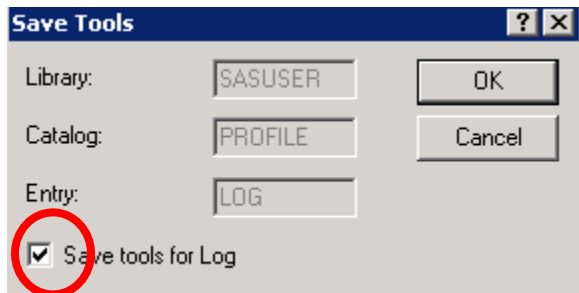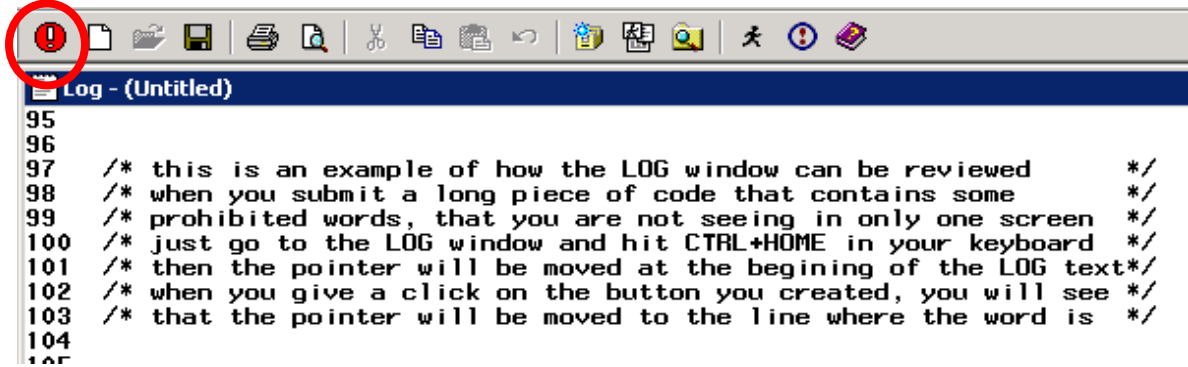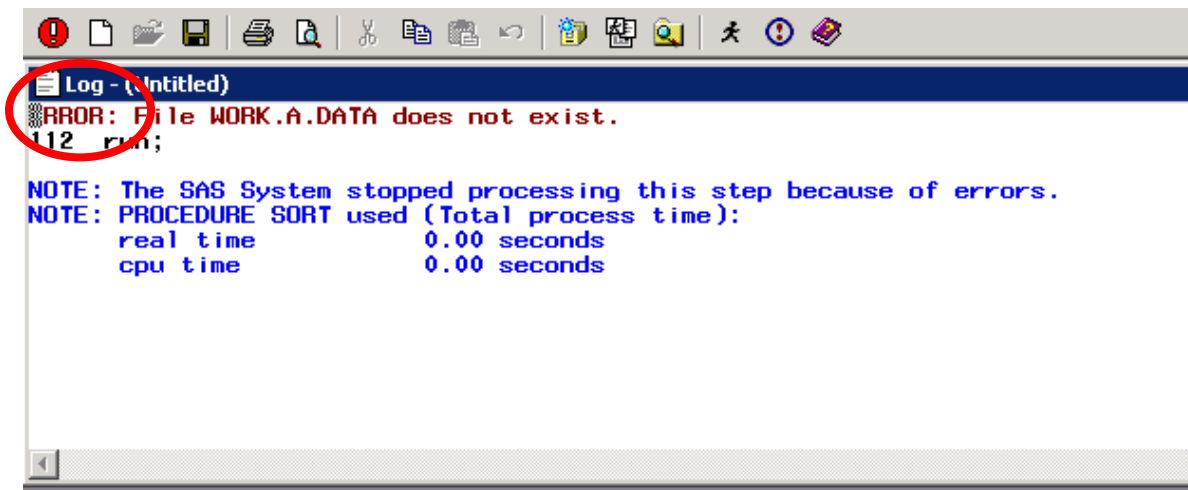
9. You will realize that when you give a click on your button, the pointer will move automatically to the line where the word "ERROR" is.

```
Log - (Untitled)
ERROR: File WORK.A.DATA does not exist.
112   run;

NOTE: The SAS System stopped processing this step because of errors.
NOTE: PROCEDURE SORT used (Total process time):
      real time              0.00 seconds
      cpu time               0.00 seconds
```

NOTE: You can use this method to look any prohibited LOG words that you want (like WARNING, Uninitialized, etc.) just make sure you use the capitalization correctly and also use quotation marks (" "), otherwise the command will not be working fine.

Are you ready for the next tip?

LOOK FOR A LIST OF VALUES USING A "WHERE-IN" EXPRESSION

Typically when working with big datasets, we do not know all the possible values that a variable may contain. It could be just a couple or thousands!
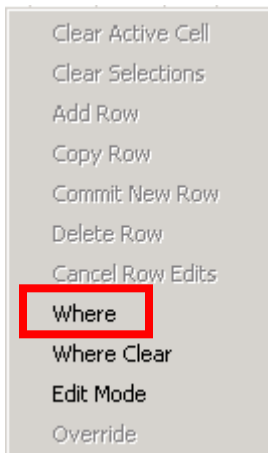
What about the number of variables is also big? That makes complicated to deal with the database… do you agree?

Let's see a basic example:

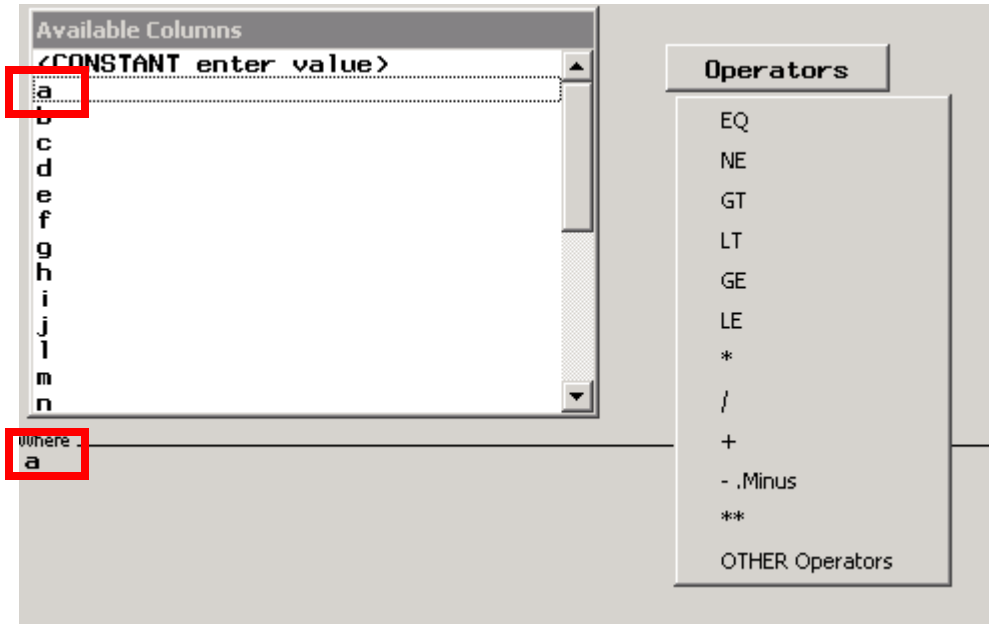|	a	b	c	d	e	f	g	h	i	j	l	m	n	o	p	q	r	s	t	u	v	w	x
1	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	14
2	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	15
3	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	16
4	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	17
5	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	18
6	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	19
7	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	20
8	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	21
9	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	22
10	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	23
11	1	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	24
12	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	14
13	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	15
14	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	16
15	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	17
16	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	18
17	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	19
18	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	20
19	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	21
20	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	22
21	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	23
22	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
23	2	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	14
24	2	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	15
25	2	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	16
26	2	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	17
27	2	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	18
28	2	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	19
29	2	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	20
30	2	3	4	5	6	7	8	9	10	11	12	13	14	14	16	17	18	19	20	21	22	23	21

At the first look, we are not very sure which are all the possible values for each variable on the dataset

1. Right click in the dataset and select "Where" condition.

Clear Active Cell
Clear Selections
Add Row
Copy Row
Commit New Row
Delete Row
Cancel Row Edits
Where
Where Clear
Edit Mode
Override

2. Select the variable you want to research.

3. The tricky part comes here… which operator do you usually select? **EQ**?

If you response was yes, I think you selected the "long way", if you select that operator and want to see the list of values for the variable, you will need to scroll down until the ""LOOKUP distinct values" option will appear.
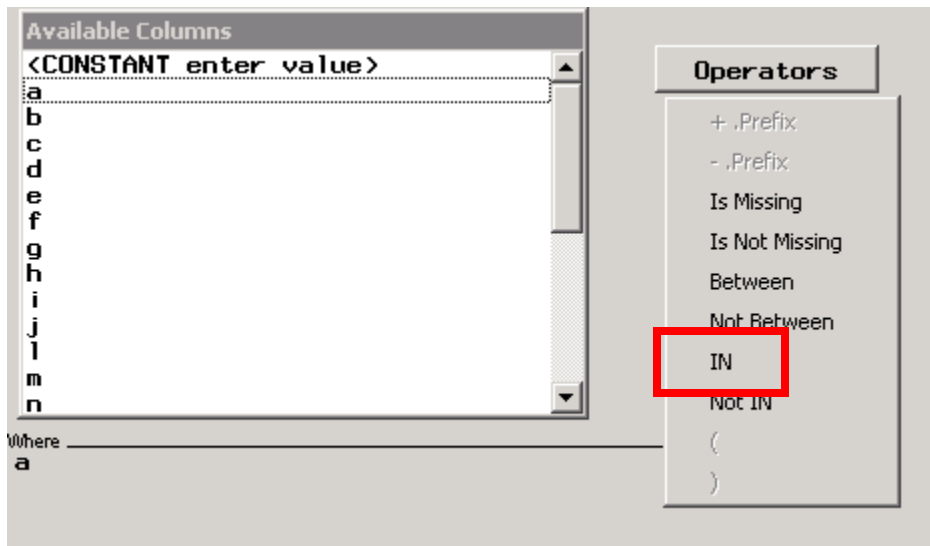
You will need to do it as many times as needed (let's imagine you have 100 variables at least), did you realize how many times do you have to scroll down until you find that option?

Let's try a "shorter way"…

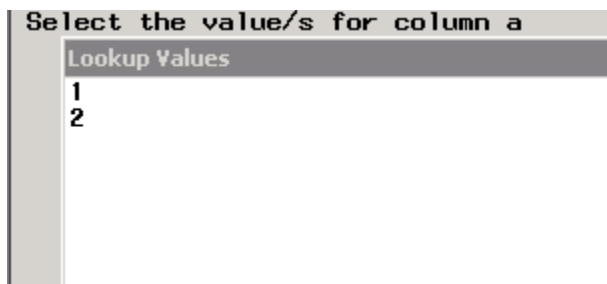4. Instead of select "**EQ**", select the "**OTHER Operators"** option
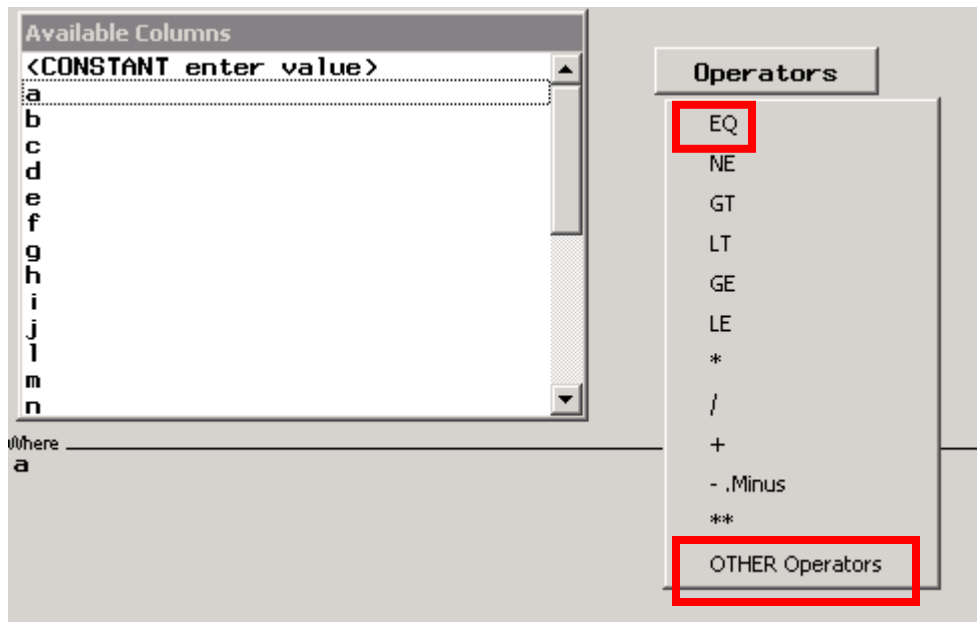
5. Then select **"IN"**

6. This action, will give you directly to the "LOOKUP distinct values" option that we wanted to see!
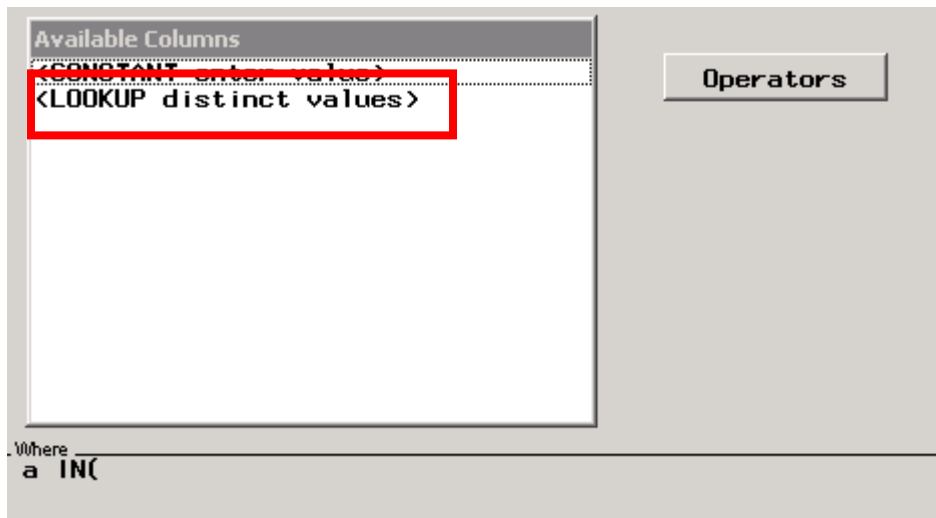
7. Finally, you will be able to see the list of values that the selected variable has.
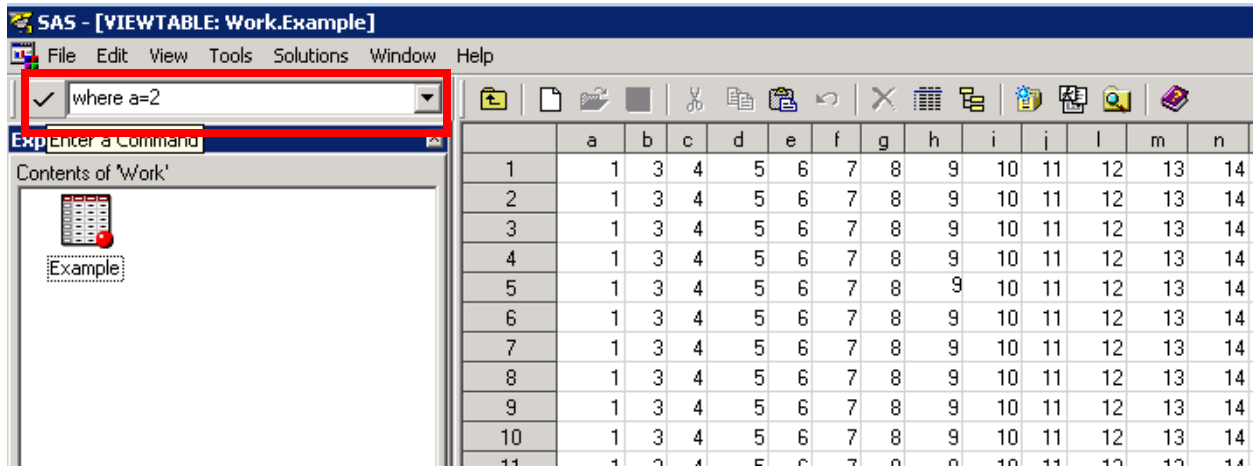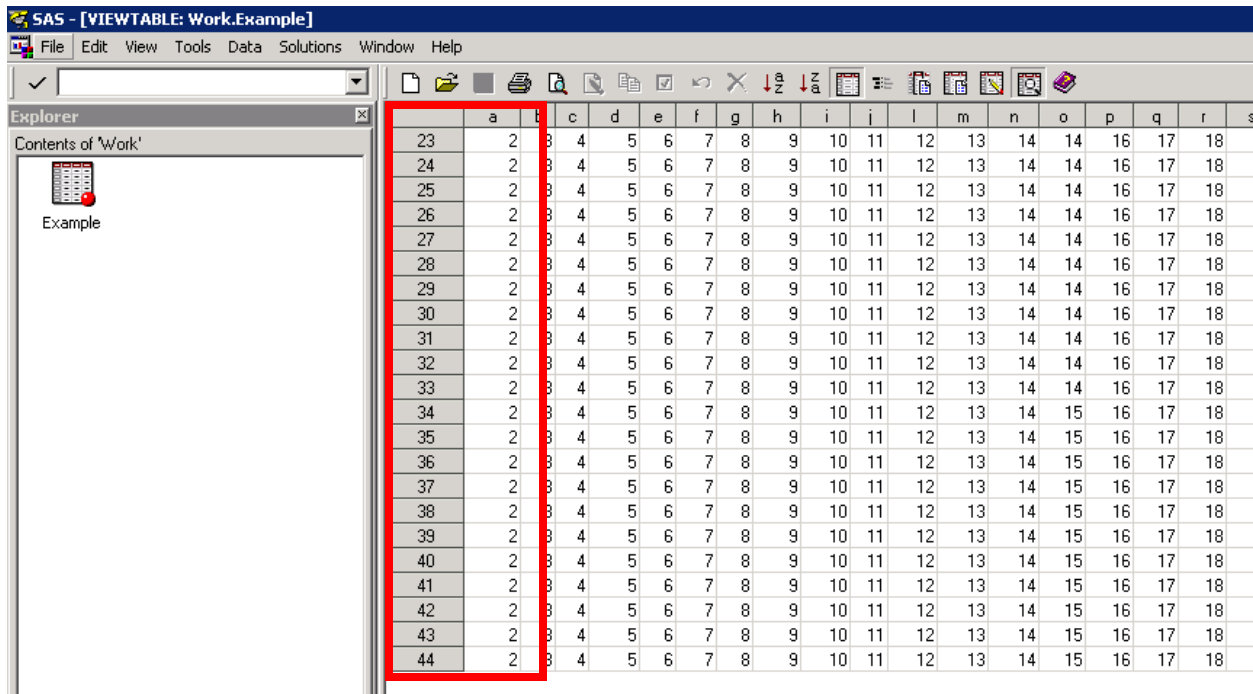

Ready for the last tip?

USING THE COMMAND BAR

This is a simple tool that you can use to filter the dataset, when you already know the value you want to see

1. Just type the where expression it in the command bar.

2. Then, hit enter, and you will see the data filtered as you wanted!

3. To remove the filter just type a new expression in the command bar or give right click in the dataset and select "Where clear" from the pop up menu.

CONCLUSION

SAS is very powerful, and it has many options and tools that we may never end to talk about, but as you know more tips and get used to use them, you can get excellent results with simpler steps.

CONTACT INFORMATION

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