

CP5804: SAS Week 2

Collaborative Tutorial

Session

Presented by Sisi

SAS Essentials

➤ Installation:

❑ SAS University Edition: https://www.sas.com/en_au/software/university-edition/download-software.html

❑ VirtualBox: https://www.virtualbox.org/wiki/Download_Old_Builds_5_2,
(Tip: please download 5.2.X builds instead of the latest version)

➤ Weekly materials:

❑ Assessments → SAS Self-Training Content

❑ Assessments → Assessment 5 (SAS Coursework)

Troubleshooting VirtualBox

- Check if you have enabled VT-X in BIOS in startup. Could refer to the link for details: https://docs.fedoraproject.org/en-US/Fedora/13/html/Virtualization_Guide/sect-Virtualization-Troubleshooting-Enabling_Intel_VT_and_AMD_V_virtualization_hardware_extensions_in_BIOS.html;
- If VT-X is already enabled, check if Hyper_V is turned off. Try running the following in Command Prompt (Run): **dism.exe /Online /Disable-Feature:Microsoft-Hyper-V**. Could refer to the link for details: <https://superuser.com/questions/1153470/vt-x-is-not-available-but-is-enabled-in-bios>;
- If the issue still exists, possibly try using VMware instead of VirtualBox.

SAS Assessments

➤ Submission due:

Week 1 - 3 due on **Wednesday of Week 4 (01/04/2020)**

Week 4 due on **Wednesday of Week 5 (08/04/2020)**

Week 5 due on **Wednesday of Week 6 (15/04/2020)**

Week 6 due on **Wednesday of Week 7 (22/04/2020)**

Week 7 non-graded

SAS Assessments

➤ Marking criteria (2/2):

☐ For activity answer sheets less than or equal to 10 questions:

- 0 – not submitted or submit non-relevant results
- 1 – more than half, but all attempted
- 1.5 – more than 2, less than half
- 2 – less than 2 incorrect answer

☐ For activity answer sheets more than 10 questions:

- 0 – not submitted or submit non-relevant results
- 1 – more than half, but all attempted
- 1.5 – more than 4, less than half
- 2 – less than 4 incorrect answer

SAS Help

- Q&A for SAS
- Setup Instructions: Assessments → SAS Self-Training Content → Video Instructions for SAS Setup
- Demo

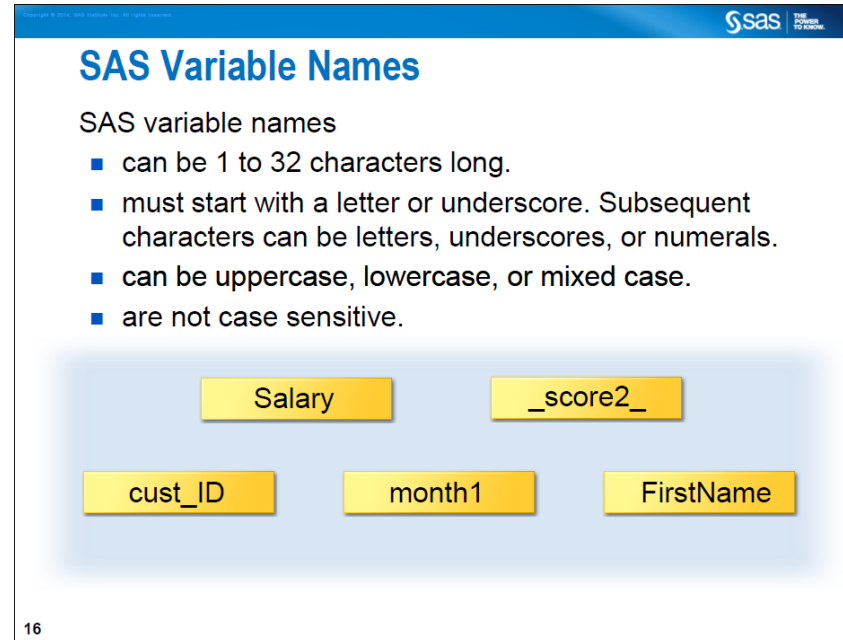
SAS Week 1 Activity Answer Sheet

➤ 3.01:

- ☐ Execute p103a01.sas program;
- ☐ Execute libname.sas file first (%let path statement should be included);
- ☐ Modify '\' into '/' if needed.

➤ 3.02:

- ☐ PG_Ch03, page 9, slide 16
- ☐ **Not case sensitive**



The screenshot shows a SAS presentation slide titled "SAS Variable Names". The slide content includes a list of rules for SAS variable names: they can be 1 to 32 characters long, must start with a letter or underscore, can be uppercase, lowercase, or mixed case, and are not case sensitive. Below the text, five variable names are displayed in yellow boxes: "Salary", "_score2_", "cust_ID", "month1", and "FirstName". The slide is numbered 16 in the bottom left corner.

SAS Variable Names

SAS variable names

- can be 1 to 32 characters long.
- must start with a letter or underscore. Subsequent characters can be letters, underscores, or numerals.
- can be uppercase, lowercase, or mixed case.
- are not case sensitive.

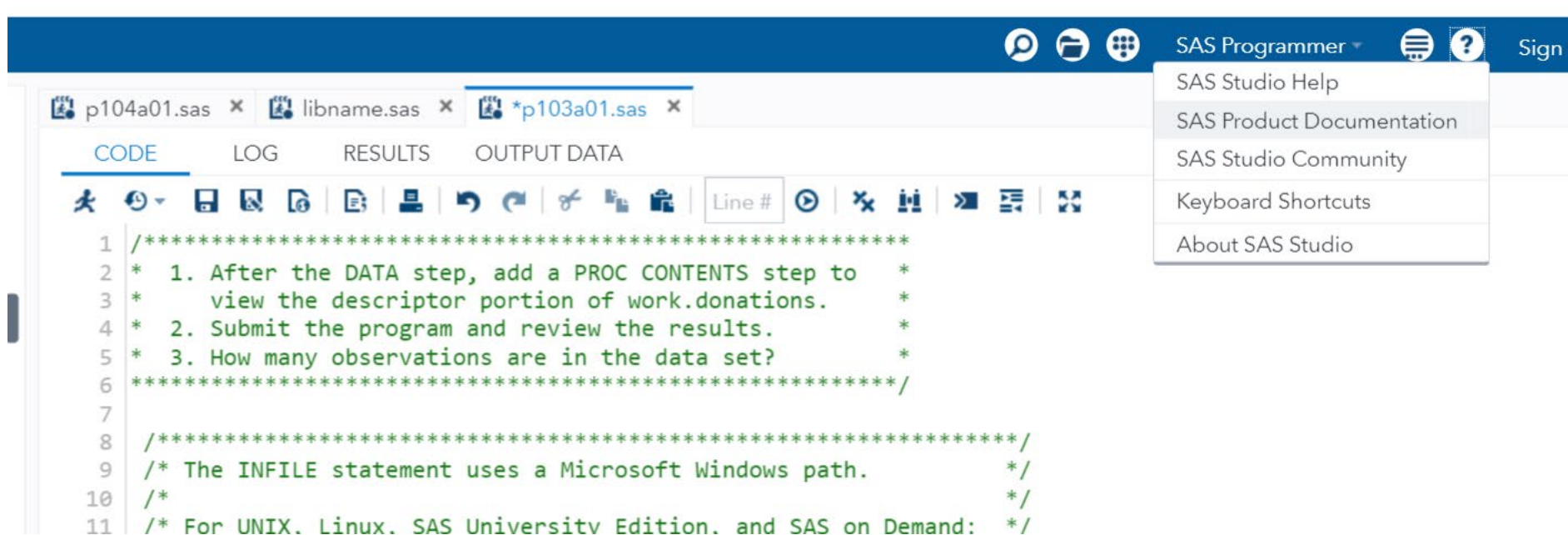
Salary _score2_

cust_ID month1 FirstName

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SAS Week 2 Activity Answer Sheet

- 4.04: 'Name' attribute is ordered as **last name, first name**
- 5.01:
 - ☐ Help → SAS Product Documentation;
 - ☐ Search for 'Zw.d' or 'Formats by Category'.



SAS Week 2 Activity Answer Sheet

➤ 5.02:

❑ PG_Ch05, page 8-9, slides 15-16;

❑ **Not case sensitive**, e.g., monyy7, Monyy7, monYY7 or MONYY7 are the same.

SAS Date Format Examples

SAS date formats display SAS date values in standard date forms.

Format	Stored Value	Displayed Value
MMDDYY10.	0	01/01/1960
MMDDYY8.	0	01/01/60
MMDDYY6.	0	010160
DDMMYY10.	365	31/12/1960
DDMMYY8.	365	31/12/60
DDMMYY6.	365	311260

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SAS Date Format Examples

Additional date formats:


Format	Stored Value	Displayed Value
DATE7.	-1	31DEC59
DATE9.	-1	31DEC1959
WORDDATE.	0	January 1, 1960
WEEKDATE.	0	Friday, January 1, 1960
MONYY7.	0	JAN1960
YEAR4.	0	1960

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SAS Week 2 Activity Answer Sheet

➤ 5.03:

- ☐ PG_Ch05, page 15, slide 27;
- ☐ User-defined formats **cannot** be given the name of a format provided by SAS

The SAS logo, featuring the letters 'sas' in a stylized font with a tagline 'THE POWER TO KNOW'.

VALUE Statement

```
VALUE format-name range1='label '  
                    range2='label '  
                    ... ;
```

A format name


- can be up to 32 characters in length
- for character formats, must begin with a dollar sign (\$), followed by a letter or underscore
- for numeric formats, must begin with a letter or underscore
- cannot end in a number
- cannot be given the name of a SAS format
- cannot include a period in the VALUE statement.

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SAS Week 2 Activity Answer Sheet

➤ 6.03:

- ☐ PG_Ch06, page 13, slide 25;
- ☐ If any operand in an arithmetic expression has a missing value, the result is a missing value.

The SAS logo, featuring the letters 'sas' in a stylized font with a blue and yellow color scheme.

Arithmetic Operators

If any operand in an arithmetic expression has a missing value, the result is a missing value.

Symbol	Definition	Priority
**	Exponentiation	I
*	Multiplication	II
/	Division	II
+	Addition	III
-	Subtraction	III

Parentheses can be used to clarify or alter the order of operations in an arithmetic expression.

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