SC statistical programming **Modifying Character Values with Functions Selected Character Functions** SCAN SUBSTR returns a specified word from a character value. extracts a substring or replaces character values. trims trailing blanks from character values. concatenates character strings, removes leading and trailing blanks, and inserts separators. searches a character expression for a string of characters, and returns the position of the string's first character for the first occurrence of the string. searches for a specific substring of characters within a character string. converts all letters in a value to uppercase. converts all letters in a value to lowercase. converts all letters in a value to proper case. replaces or removes all occurrences of a pattern of characters within a character string.

SC statistical programming

SCAN Function

The SCAN function uses <u>delimiters</u> to separate a character string into words.

For example:

the comma as a delimiter, the SCAN function separates the string into three words.



then the function returns whichever word you specify.

If we specify the third word, the SCAN function returns the word $\ensuremath{\mathsf{HIGH}}\xspace.$



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SCAN Function Syntax

General form, SCAN function:

SCAN(argument, n, 'delimiters')

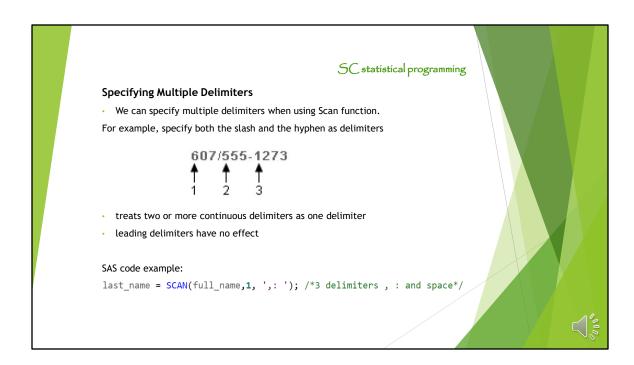
Example: variable Name has values like 'Smith, Sara' - 'Last name', First name'

LastName=scan(name,1,' ,');

where

- argument specifies the character variable or expression to scan.
- n specifies which word to return.
- delimiters are special characters that must be enclosed in single quotation marks (' ').
- If you do not specify delimiters, <u>default delimiters</u> (blank . < (+ | & ! \$ *) ; ^ / , %) are used.





When using the SCAN function, you can specify as many delimiters as needed to correctly separate the character expression.

When you specify multiple delimiters, SAS uses any of the delimiters, singly or in any combination, as word separators.

For example, if you specify both the slash and the hyphen as delimiters, the SCAN function separates the following text string into three words.