m_utl_sort_elems.sas File Reference

Utilities

Utility macro to sort words by a delimiter in a text string

Description

The macro reads a text string with a list of words as input, to be sorted alphabetically using the SORTC function call. With the MODE parameter value the sort order can be set to either Ascending or Descending on the result text string. The result list can be quoted by quoting each word within the text string and is separated by a delimiter which can be a blank or a comma.

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Version

23.1.03

Link

https://github.com/paul-canals/toolbox

Parameters

Input	help	Parameter, if set (Help or ?) to print the Help information in the log. In all other cases this parameter should be left out from the macro call.
Input	list	Character string containing a of words. The default value for LIST is: _NONE_.
Input	mode	Indicator [A|D] to specify the sort order of the words in the result text string. The sorting is either performed in A:Ascending or D:Descending order. The default value for MODE is: A.
Input	quoted	Boolean [Y|N] parameter to specify if each word in the output text string should to be quoted. The default value for QUOTED is: N.
Input	in_dlm	Indicator [BLANK|COMMA] to select the input delimiter type. The default value is: BLANK.
Input	out_dlm	Indicator [BLANK|COMMA] to select the output delimiter type. The default value is: BLANK.
Input	debug	Boolean [Y|N] parameter to provide verbose mode information. The default value is: N.

Returns

- Sorted list of words or numbers.

Calls

- m_utl_print_message.sas
- m_utl_print_mtrace.sas
- m_utl_quote_elems.sas

Usage

Example 1: Show help information:

```
%m_utl_sort_elems(?)
```

Example 2: Sort all words in the text string (blank):

```
%let list =
    %m_utl_sort_elems(
        list     = %str(Judy Joyce Jane Alice Janet Chris)
      , debug    = Y
        );

data WORK.result;
    length example 8 list $50.;
    example = 2;
    list = "Judy Joyce Jane Alice Janet Chris";
    output;
    example = 2;
    list = "&list.";
    output;
run;

proc print data=WORK.result;
run;
```

Example 3: Sort all words in the text string (comma):

```
%let list =
    %m_utl_sort_elems(
        list     = %str(Judy Joyce Jane Alice Janet Chris)
      , out_dlm = COMMA
      , debug    = Y
        );

data WORK.result;
    length example 8 list $50.;
    example = 3;
    list = "Judy Joyce Jane Alice Janet Chris";
    output;
    example = 3;
    list = "&list.";
    output;
run;

proc print data=WORK.result;
run;
```

Example 4: Sort all words in the text string (quoted):

```
%let list =
    %m_utl_sort_elems(
        list     = %str(Judy, Joyce, Jane, Alice, Janet, Chris)
      , quoted   = Y
      , in_dlm   = C
      , debug    = Y
        );

data WORK.result;
    length example 8 list $50.;
    example = 4;
    list = "Judy, Joyce, Jane, Alice, Janet, Chris";
    output;
    example = 4;
    list = "&list.";
    output;
run;

proc print data=WORK.result;
run;
```

Example 5: Sort all words in the text string (quoted,comma):

```
%let list =
    %m_utl_sort_elems(
        list     = %str(Judy, Joyce, Jane, Alice, Janet, Chris)
      , quoted   = Y
      , in_dlm   = C
      , out_dlm  = C
      , debug    = Y
        );

data WORK.result;
    length example 8 list $50.;
    example = 5;
    list = "Judy, Joyce, Jane, Alice, Janet, Chris";
    output;
    example = 5;
    list = "&list.";
    output;
run;

proc print data=WORK.result;
run;
```

Example 6: Sort all numbers in the text string (comma):

```
%let str = %str(10 9 8 1 3 2 4 7 5 6);

data WORK.result;
    length example 8 list $50.;
    example = 6;
    list = "&str.";
    output;
    example = 6;
    list = "%m_utl_sort_elems(list=&str.,in_dlm=B,out_dlm=C)";
    output;
run;

proc print data=WORK.result;
run;
```

Example 7: Sort the text string in descending order (blank):

```
%let str = %str(10 9 8 1 3 2 4 7 5 6);

data WORK.result;
    length example 8 list $50.;
    example = 7;
    list = "&str.";
    output;
    example = 7;
    list = "%m_utl_sort_elems(list=&str.,in_dlm=B,mode=D)";
    output;
run;

proc print data=WORK.result;
run;
```