StringSort

This is an embedded C module which will sort an array of strings into ascending alphabetical order. It was written by Peter Mather (http://www.thebackshed.com/forum/forum_posts.asp?TID=7370&PN=1).

Adding StringSort to MMBasic

To add the StringSort subroutine to MMBasic you must insert the following code somewhere in your BASIC program (you can use copy and paste from this document). The exact spot is not important but at the end of the program is typical.

```
CSub StringSort
    00000000
    27bdfff0 afb3000c afb20008 afb10004 afb00000 8cc30000 24630001 8cb90000
    2b250002 14a00041 00603021 10000038 00838021 01a09821 918e0000 91af0000
    01cf502b 01c01021 01ea100a 10400011 01809021 25850001 25a90001 004c5021
    90a80000 91270000 0107102b 00e8382b 0162380b 10aa0005 00e01021 14e00009
    24a50001 1000fff6 25290001 14e00005 00000000 01cf282b 14a00014 01601021
    01ee102b 54430012 27180001 01ee282b 01e5700a 11cb000d 00608821 25850001
    00ae7021 02603821 02402821 90a80000 90e90000 a0a90000 a0e80000 24a50001
    14aefffa 24e70001 00608821 27180001 01866021 0319282a 14a0ffce 01a66821
    56200005 00806021 10000009 00021fc3 240bffff 00806021 02006821 00008821
    24180001 1000ffc3 24030001 00021fc3 8fb3000c 8fb20008 8fb10004 8fb00000
    03e00008 27bd0010
End CSub
```

Parameters

The StringSort subroutine (created by adding the above code) takes three parameters:

> StringSort ArrayOfStrings$(), NbrOfStrings, ElementLength

Where:

ArrayOfStrings = The string array to be sorted. Note that it is passed with empty brackets (ie, ArrayOfStrings$()).

NbrOfStrings = The number of strings to be sorted (ie, the number of elements in the array). Note that unless the command OPTION BASE is used an array will start with an index of zero and contain one more element than that specified in the DIM command.

ElementLength = The amount of memory allocated to each element of the array. Normally it is 255 but it must match the parameter of the LENGTH qualifier if that feature of the DIM command was used when the array was dimensioned.

The string will be sorted according to the ASCII character set and is case sensitive (ie, "B" will come before "a").

Using the Function

This example creates a small array of three strings, populates the array and then uses StringSort as a command to sort it into alphabetical order:

```
DIM S$(2) LENGTH 20
S$(0) = "John"
S$(1) = "Aaron"
S$(2) = "Eric"
StringSort S$(), 3, 20
```

Note that OPTION BASE was not used which means that the base for arrays defaults to zero which in turn means that the array will start with an index of zero and contain one more element than that specified in the DIM command.