

# IntegerSort

This is a CFunction module which will sort an array of integers into ascending numerical order. It was written by Peter Mather ([http://www.thebackshed.com/forum/forum\\_posts.asp?TID=7360&PN=1](http://www.thebackshed.com/forum/forum_posts.asp?TID=7360&PN=1)).

## Adding the Function to MMBasic

To add the IntegerSort function 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.

```
CFunction IntegerSort
00000000
27bdf8ff8 afb10004 afb00000 8cad0000 10000032 01a01021 8df10000 8dea0004
01c2282a 14a00022 01c01821 03201821 8f060004 0146282a 14a00005 8f080000
14ca001a 0228282b 50a00019 01c01821 02002821 10000003 01c03821 00603821
01201821 000738c0 00873821 ace80000 ace60004 0062302a 14c0000d 006b4821
8ca80000 8ca60004 0146382a 14e0fff3 00ac2821 14ca0006 0228382b 14e0fff0
00603821 10000003 000318c0 01c01821 000318c0 00831821 ac710000 ac6a0004
25ce0001 27390001 25ef0008 27180008 01cd182a 1460ffd0 26100008 00021fc2
00621021 00021043 1040000e 004d182a 1060ffffb 00021fc2 000278c0 008f7821
0080c021 00028023 001080c0 02006021 00908021 00407021 0000c821 1000ffbe
00025823 00001021 00001821 8fb10004 8fb00000 03e00008 27bd0008
End CFunction
```

## Parameters

The IntegerSort function (created by adding the above code) takes two parameters:

r% = IntegerSort( ArrayOfInteger%(), NbrOfIntegers )

Where:

ArrayOfInteger = The integer array to be sorted. Note that it is passed with empty brackets (ie, ArrayOfInteger%()).

NbrOfIntegers = The number of integers 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.

The return value does not mean anything and can be ignored.

## Using the Function

This example creates a small array of three integers, populates the array and then uses IntegerSort to sort the array into numeric order:

```
DIM N%( 2 )
N%( 0 ) = 100
N%( 1 ) = 5
N%( 2 ) = 50
r% = IntegerSort( N%(), 3 )
```

Note that OPTION BASE was not used which means that the base for an array will default 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.