## sort

## Return a structure ordered

Ascending is indicated by ASC and Descending by DESC in the examples, and sorting on keys is indicated by KEYS while by value is VALUE

```
\$result = sort(\$source[, ASC \mid DESC [, VALUE \mid KEY]])
```

```
Examples:
$\text{sesult} = \text{source}; \text{// default same as sort($\text{source, 'ASC', 'VALUE')};}
$result = sort($source, 'DESC'); // same as sort($source, 'DESC', 'VALUE');
Sorting examples:
Example 1 - default value sorting:
$p.. = "orange";
$p.. = "apple";
$p.. = "banana";
p = sort(p);
console("Defaults:"); dump($p);
Example 1 - results:
Defaults:
.[1] apple
.[2] banana
.[0] orange
Example 2 - default descending:
p = sort(p, 'DESC');
console("DESC:"); dump($p);
Example 2 - results:
DESC:
.[0] orange
.[1] banana
.[2] apple
Example 3 - key descending:
$p.orange = "10 available";
$p.apple = "20 available";
$p.banana = "30 available";
p = sort(p, 'DESC', 'KEY');
console("KEY DESC:"); dump($p);
Example 3 - results:
KEY DESC:
.[orange] 10 available
.[banana] 30 available
.[apple] 20 available
Example 4 - file order, where date is in filename:
Might not be an issue as get file paths seems to return files in a name order.
$dir = lookup_dictionary("MI_WMI");
$dir = $dir.directory;
$dir = "{$dir}\History1";
$files = get_file_paths($dir);
console("Original processing order would have been:");
for all $file_index in $files begin
   console($files.$file_index);
// Extract a date or order from file name
for all $file_index in $files begin
   $matches = preg_match("/region[\d]{1,1}[\d]{2,2}(?P[\d]{8,8}).*/i",$files.$file_index);
   if $matches is not false begin
```

\$sorted\_files.\$key = \$files.\$file\_index;

\$key = \$matches.sort on;

```
end
  end
$sorted files = sort($sorted files, 'ASC', 'KEY');
console("Sorted order would be:");
for all $date_order in $sorted_files begin
console("{$date order}: {$sorted files.$date order}");
end
Example 4 - results:
Original processing order would have been:
c:\MI_WMI\History1/region202201203091024.zip
c:\MI_WMI\History1/region206201203051252.zip
c:\MI_WMI\History1/region211201203061257.zip
\verb|c:\MI_WMI\History1/region21720120308125.zip| \\
c:\MI_WMI\History1/region239201203071220.zip
c:\MI_WMI\History1/region271201203021216.zip
Sorted order would be:
20120302: c:\MI_WMI\History1/region271201203021216.zip
20120305: c:\MI_WMI\History1/region206201203051252.zip
20120306: c:\MI_WMI\History1/region211201203061257.zip
20120307: c:\MI_WMI\History1/region239201203071220.zip
20120308: c:\MI_WMI\History1/region21720120308125.zip
20120309: c:\MI_WMI\History1/region202201203091024.zip
```