
sort

syntax: `sort(data)`

purpose: Sorts a vector of numerical data in ascending order.

example: `>> data = [3 5 2 3 1 4 5 3];`

Sorting the data puts the values in ascending order. Here we will create a new variable, `sdata`, to hold the sorted data set.

```
>> sdata = sort(data)
ans:      1 2 3 3 3 4 5 5
```

It's important to realize that the `sort` function, like almost every other MATLAB function, does not change the value of its argument. `data` remains exactly as it was:

```
>> data ⇒ ans:  3 5 2 3 1 4 5 3
```

The sorted data is in the variable we created to hold the result of `sort(data)`:

```
>> sdata ⇒ ans:  1 2 3 3 3 4 5 5
```

To sort in descending order, you can use a quick trick:

```
>> -sort(-data) ⇒ ans:  5 5 4 3 3 3 2 1
```

or, you can simply reverse the order of the sorted elements:

```
>> reverse(sort(data)) ⇒ ans:  5 5 4 3 3 3 2 1
```

`sort` is a built-in MATLAB function.

See also: `TAGSORT`, `DEDUP`, `REVERSE`

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