
weed

syntax: `weed(data, test)`

purpose: Eliminates any values in `data` that passes the test

Examples: `data = [1 2 3 4 5 6];`

```
>> weed(data, data>3)
ans:    1 2 3
```

Weed can be particularly useful for eliminating missing data from a data set in order to allow the non-missing data to be properly analyzed. This is done simply with

```
>> cleandata = weed(data, ismissing(data))
```

In many situations, you have several parallel data sets that consist of multiple measurements of each case. Sometimes you want to extract only those cases for which all the measurements are valid.

```
data1 = [4 5 NaN 8 12 NaN 13];
data2 = [NaN 22 26 24 31 17 43];
```

We wish to consider only those cases where both `data1` and `data2` are valid. This can be done with the following steps:

```
>> foo = ismissing(data1 + data2)
foo:    1 0 1 0 0 1 0
>> cleandata1 = weed(data1, foo)
cleandata1:    5 8 12 13
>> cleandata2 = weed(data2, foo)
cleandata2:    22 24 31 43
```

Note that the correspondence between entries in `data1` and `data2` has been preserved.

This procedure can be extended to any number of data sets, assuming that all the data sets are of the same length. For example, for three data sets:

```
foo = ismissing(data1 + data2 + data3);
cleandata1 = weed(data1, foo);
cleandata2 = weed(data2, foo);
cleandata3 = weed(data3, foo);
```

For MATLAB experts: The trick for finding missing data in multiple datasets, `ismissing(data1+data2+...)` works because NaN added to any other number produces NaN.

See also: ISMISSING, SETMISING

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