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>> help min
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MIN     Smallest component.

For vectors, MIN(X) is the smallest element in X. For matrices, MIN(X) is a row vector containing the minimum element from each column. For N-D arrays, MIN(X) operates along the first non-singleton dimension.

[Y,I] = MIN(X) returns the indices of the minimum values in vector I. If the values along the first non-singleton dimension contain more than one minimal element, the index of the first one is returned.

MIN(X,Y) returns an array the same size as X and Y with the smallest elements taken from X or Y. Either one can be a scalar.

[Y,I] = MIN(X,[],DIM) operates along the dimension DIM.

When X is complex, the minimum is computed using the magnitude MIN(ABS(X)). In the case of equal magnitude elements, then the phase angle MIN(ANGLE(X)) is used.

NaN's are ignored when computing the minimum. When all elements in X are NaN's, then the first one is returned as the minimum.

Example: If X =  $\begin{bmatrix} 2 & 8 & 4 \\ 7 & 3 & 9 \end{bmatrix}$  then min(X,[],1) is [2 3 4],

min(X,[],2) is [2 3], and min(X,5) is  $\begin{bmatrix} 2 & 5 & 4 \\ 5 & 3 & 5 \end{bmatrix}$ .

See also [max](#), [median](#), [mean](#), [sort](#).

Overloaded methods:

[timeseries/min](#)

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Reference page in Help browser

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