

Language	MATLAB/Octave	Python	R
Example data	<code>a = [4 3 2 ; 2 8 6 ; 1 4 7]</code>	<code>a = array([[4,3,2],[2,8,6],[1,4,7]])</code>	
Flat and sorted	<code>sort(a(:))</code>	<code>a.ravel().sort()</code> or	<code>t(sort(a))</code>
Sort each column	<code>sort(a)</code>	<code>a.sort(axis=0)</code> or <code>msort(a)</code>	<code>apply(a,2,sort)</code>
Sort each row	<code>sort(a')'</code>	<code>a.sort(axis=1)</code>	<code>t(apply(a,1,sort))</code>
Sort rows (by first row)	<code>sortrows(a,1)</code>	<code>a[a[:,0].argsort(),]</code>	
Sort, return indices		<code>a.ravel().argsort()</code>	<code>order(a)</code>
Sort each column, return indices		<code>a.argsort(axis=0)</code>	
Sort each row, return indices		<code>a.argsort(axis=1)</code>	

$$\begin{bmatrix} 4 & 3 & 2 \\ 2 & 8 & 6 \\ 1 & 4 & 7 \\ 1 & 2 & 2 \\ 3 & 4 & 4 \\ 6 & 7 & 8 \\ 1 & 3 & 2 \\ 2 & 4 & 6 \\ 4 & 8 & 7 \\ 2 & 3 & 4 \\ 2 & 6 & 8 \\ 1 & 4 & 7 \\ 1 & 4 & 7 \\ 2 & 8 & 6 \\ 4 & 3 & 2 \end{bmatrix}$$