1. Implement Rolling median filter with reference to <https://en.wikipedia.org/wiki/Median_filter>

## Example Worked one-dimensional example[[edit](https://en.wikipedia.org/w/index.php?title=Median_filter&action=edit&section=2" \o "Edit section: Worked one-dimensional example)]

To demonstrate, using a window size of three with one entry immediately preceding and following each entry, a median filter will be applied to the following simple one-dimensional signal:

*x* = (2, 3, 80, 6, 2, 3).

So, the median filtered output signal *y* will be:

*y*1 = med(2, 3, 80) = 3, (already 2, 3, and 80 are in the increasing order so no need to arrange them)

*y*2 = med(3, 80, 6) = med(3, 6, 80) = 6, (3, 80, and 6 are rearranged to find the median)

*y*3 = med(80, 6, 2) = med(2, 6, 80) = 6,

*y*4 = med(6, 2, 3) = med(2, 3, 6) = 3,

i.e. *y* = (3, 6, 6, 3).