

A long array $A[]$ is given to you. There is a sliding window of size w which is moving from the very left of the array to the very right. You can only see the w numbers in the window. Each time the sliding window moves rightwards by one position.

Example :

The array is $[1\ 3\ -1\ -3\ 5\ 3\ 6\ 7]$, and w is 3.

Window position	Max
$[1\ 3\ -1]\ -3\ 5\ 3\ 6\ 7$	3
$1\ [3\ -1\ -3]\ 5\ 3\ 6\ 7$	3
$1\ 3\ [-1\ -3\ 5]\ 3\ 6\ 7$	5
$1\ 3\ -1\ [-3\ 5\ 3]\ 6\ 7$	5
$1\ 3\ -1\ -3\ [5\ 3\ 6]\ 7$	6
$1\ 3\ -1\ -3\ 5\ [3\ 6\ 7]$	7

Input: A long array $A[]$, and a window width w

Output: An array $B[]$, $B[i]$ is the maximum value of from $A[i]$ to $A[i+w-1]$