Problem

Zenyk recently got an array with his n school grades $a_1, a_2, \ldots, a_n$. He isn't very happy with them and knows that his parents also will not be happy with his grades. But he also knows that his parents evaluate his performance in a very strange way. They care only about the middle element in the array of grades Zenyk got. More formally if Zenyk's array is b and it has m elements, $b_{\lfloor (m+1)/2 \rfloor}$ is Zenyk's performance. Zenyk doesn't want to disappoint his parents, so he wants to erase exactly $k (k < n)$ grades from his array a in order to maximize his score.

Input format

The first line contains two integers $n, k (1 \leq k < n \leq 10^5)$ --- the number of Zenyk's grades and the number of grades Zenyk should delete, respectively.
The second line contains n integers $a_1, a_2, \ldots, a_n$ $(1 \leq a_i \leq 10^9)$ --- Zenyk's grades.

Output format

You should output only one integer --- maximum score Zenyk can get.

Sample Input	Sample Output
5 2 47 4 7 44 77	44

Time Limit: 1

Memory Limit: 256

Source Limit: