

# Problem J. Jealous Split

Input file: *standard input*  
Output file: *standard output*  
Time limit: 2 seconds  
Memory limit: 256 mebibytes

You have an array of non-negative integers  $a_1, a_2, \dots, a_n$ .

You need to split it into  $k$  non-empty subsegments:  $[1; b_1], [b_1 + 1; b_2], \dots, [b_{k-1} + 1; n]$ .

Let us denote the sum on  $i$ -th segment as  $s_i$  and the maximum on  $i$ -th segment as  $m_i$ . Your goal is to make  $|s_i - s_{i+1}| \leq \max(m_i, m_{i+1})$  for each  $1 \leq i \leq k - 1$ .

## Input

The first line of the input contains two integers  $n$  and  $k$ : the size of the array and the required number of segments ( $3 \leq k \leq n \leq 100\,000$ ).

The next line contains  $n$  integers  $a_1, a_2, \dots, a_n$ : the given array ( $0 \leq a_i \leq 50\,000$ ).

## Output

If splitting is possible, print “Yes” on the first line, and then print  $k - 1$  space-separated integers  $b_1, b_2, \dots, b_{k-1}$  on the second line. The integers must satisfy  $1 \leq b_1 < b_2 < \dots < b_{k-1} < n$ . Additionally, the inequalities  $|s_i - s_{i+1}| \leq \max(m_i, m_{i+1})$  must hold for each  $1 \leq i \leq k - 1$ . If there are several possible solutions, print any one of them.

If splitting is impossible, print “No” on a single line.

## Example

standard input	standard output
5 3 17 18 17 30 35	Yes 2 4