

## E. Pillars

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

Marmot found a row with  $n$  pillars. The  $i$ -th pillar has the height of  $h_i$  meters. Starting from one pillar  $i_1$ , Marmot wants to jump on the pillars  $i_2, \dots, i_k$ . ( $1 \leq i_1 < i_2 < \dots < i_k \leq n$ ). From a pillar  $i$  Marmot can jump on a pillar  $j$  only if  $i < j$  and  $|h_i - h_j| \geq d$ , where  $|x|$  is the absolute value of the number  $x$ .

Now Marmot is asking you find out a jump sequence with maximal length and print it.

### Input

The first line contains two integers  $n$  and  $d$  ( $1 \leq n \leq 10^5$ ,  $0 \leq d \leq 10^9$ ).

The second line contains  $n$  numbers  $h_1, h_2, \dots, h_n$  ( $1 \leq h_i \leq 10^{15}$ ).

### Output

The first line should contain one integer  $k$ , the maximal length of a jump sequence.

The second line should contain  $k$  integers  $i_1, i_2, \dots, i_k$  ( $1 \leq i_1 < i_2 < \dots < i_k \leq n$ ), representing the pillars' indices from the maximal length jump sequence.

If there is more than one maximal length jump sequence, print any.

### Examples

input
5 2 1 3 6 7 4
output
4 1 2 3 5

input
10 3 2 1 3 6 9 11 7 3 20 18
output
6 1 4 6 7 8 9

### Note

In the first example Marmot chooses the pillars 1, 2, 3, 5 with the heights 1, 3, 6, 4. Another jump sequence of length 4 is 1, 2, 4, 5.