Problem F. Pillars

Time limit   1000 ms
Mem limit   262144 kB

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 $i_2, ..., i_k$. ($1 \leq i_1 < i_2 < ... < i_k \leq n$). 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 $h_1, h_2, ..., h_n$ ($1 \leq h_i \leq 10^{15}$).

Output

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

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

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

Sample 1

Input	Output
5 2 1 3 6 7 4	4 1 2 3 5

Sample 2

Input	Output
10 3 2 1 3 6 9 11 7 3 20 18	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.