Problem B. Sorting Device

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

After being stuck at home for months because of covid, you decided to explore the contents of your parent's basement. Among numerous useless items, you found one peculiar object - a sorting device from the sixties that was used to teach sorting algorithms. The device consists of N ordered slots that get initialized with distinct integers once the device is turned on, and a screen for tracking cost. As a user, you can perform swap operations. One swap operation allows you to swap elements at positions i and j for a total cost of $A * |i - j| + B$, where A, B are parameters written on the back of the device. Since you've been studying your sorting algorithms, you definitely know how to sort the numbers with the smallest possible cost. Right?

Input

The first line contains a single integer N ($1 \leq N \leq 2 \cdot 10^5$) - the number of slots the machine has. The next line has N space-separated integers up to 10^9 in absolute value that the machine generated after you turned it on. The last line has two positive integers A, B from the machine specs. $1 \leq A, B \leq 1\,000$.

Output

In the first line, output the smallest cost needed to sort the sequence. In the second line, output K - the number of swaps needed to do that. In the next K lines output the description of the swaps that need to be done. In each line output two numbers - indices of elements to be swapped, separated by a space. Indices start with one. If two or more sequences have the same total cost, you can output any of them.

Examples

standard input	standard output
4 42 35 13 21 1 1	7 3 1 3 3 4 2 3
6 6 5 4 3 2 1 5 3	54 3 3 4 2 5 1 6