# Dragon Boat Festival Game

## Description

The Dragon Boat Festival is coming. The headmaster of HuaDe School of Applied Technology of Harbin Institute of Technology decides to hold a celebration, of course, an interesting game is necessary in that day. as a famous science school, the students are clever in it, so the teacher who is teaching algorithm thought an interesting and difficult problem, it is about number sequence, and the headmaster will award the winner the title of "Little Math Prince"

The rule of the game is as follows:

1. Sequence A has N elements (1<=N<=100000), and each element Ai is a positive integer and its value is smaller than 10000;

2. Unchanged the position of these elements, we split the sequence into several segments, and the sum of each segment cannot exceed M (1<=M<=10000000000, and M is not less than every element in sequence A);

3. Every segment has a weight Vk, the weight of the k-th segment can work out by the follow expression:

Vk = Sum( i, j ) + S \* Ai + S \* Aj + C,

Sum( i, j ) means the sum of the elements which is in the k-th segment,

S, C are the given integers (-1000000<S, C<1000000),

Ai is the first element, and Aj is the last element in the k-th segment;

4. The total score is the sum of all segments.

XiaoA as a clever boy, wants the title very much, so he thinks hardly to get the maximum score.

## Input

There are several test cases. Each test case begin with a line which contains four integers, N, M, S and C; and the second line contains N integers ,they indicate the elements of the sequence in order 1, 2, ..., N. After each test case, there is a blank line. Proceed to the end of file.

## Output

For each case, You should output the M and K in the first line, M means the Maximum score and K means the sequence is spitted into K segments. And in the follow K line, you should output two integers a and b, they are the begin and end position of each segment. Between two outputs there will be a blank line.

## Sample Input

4 8 0 10

1 2 3 4

4 8 100 -100

4 3 2 1

## Sample Output

50 4

1 1

2 2

3 3

4 4

10 2

4 3

2 1