Problem I. Identical Fences

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

Dwarf the Builder has recently retrained to become a fence constructor. All his new tasks boil down to one thing: building fences that meet specific aesthetic requirements. Sounds simple...

Builder's latest task is to construct two fences on opposite sides of a street. The fences will consist of two types of pickets: black and red. This time, the aesthetic requirement is simple: the fences must be identical.

However, as is often the case on construction sites, some problems have arisen. The pickets for the fences will arrive at the construction site **one by one**, in a specific order known to the Builder in advance. For each picket, the Builder must **immediately** make one of two decisions: attach it to the (right) end of one of the fences, or discard it if it doesn't fit his plan.

The Builder knows that the pickets were loaded onto trucks completely **randomly**: each one can be black or red with equal probability. He knows the order in which the pickets will arrive at the construction site, but now he faces another challenge. The construction manager will allow him to reject some pickets, but **this number cannot exceed** 16% of all delivered pickets.

It seems that Builder has a tough task ahead of him. Can you help him?

Input

The first line of input contains a single integer N, representing the number of pickets that will arrive at the construction site.

The second line contains a string of length N consisting of characters `0` and `1`, representing the colors of consecutive pickets (red and black, respectively) that will arrive at the construction site.

Output

The first output line should contain a single integer K, representing the number of pickets that will make up each fence.

The second line should contain the subsequent indices of pickets that will form the first fence.

The third line should contain the subsequent indices of pickets that will form the second fence.

Each fence should be described in ascending order using 0-indexed numbering.

In each test the number of discarded pickets should not exceed 16%.

Limits

In all tests **it holds that** $N = 100\,000$, and the colors of pickets are chosen independently at random.

Small example

standard input	standard output
13 0110101001011	6 5 6 8 9 10 12 0 2 3 4 7 11

Attention: the above example does not satisfy the condition $N = 100\,000$, so you are not required to pass it. The sample in the judge system satisfies all the problem conditions.