First repeated subword of size 3 X98718_en

Implement a program such that, given a sequence of characters from `{a,b}`, tells which one is the first subword of size 3 which is repeated if we read the input from the beginning, and on what position this first repetition takes place (positions are assumed to be indexed starting from 0).
We consider repetitions including overlappings. For exmple, in the sequence `ababa`, the subword `aba` has size 3 and is repeated for the first time at position 2.
It is guaranteed that there will be at least one repetition of a subword of size 3.

Input

The input contains only one line with a consecutive sequence of characters from `{a,b}`. It is guaranteed that at least one subword of size 3 occurs twice or more in the input sequence.

Output

The output contains the first subword of size 3 which is repeated, and the position of the first character of the first repetition (indexing positions from 0). These data must be printed on one line and separated by a white space.

Sample input 1	Sample output 1
`bbbaaaaaabaaababababaaabbbbbbabbaabbbabbabbaaaaa`	`baa 4`
Sample input 2	**Sample output 2**
`aaabbaabbbaaabaaababaabababbaaaababaaabbaabaaabbb`	`abb 5`
Sample input 3	**Sample output 3**
`abbbaaababaabaaaabaabbaaabbbabbaabab`	`aba 8`
Sample input 4	**Sample output 4**
`aaabbabbabbaaaba`	`abb 5`
Sample input 5	**Sample output 5**
`baaababbbaaababbb`	`baa 8`
Sample input 6	**Sample output 6**
`aabbababaabbb`	`bab 5`
Sample input 7	**Sample output 7**
`bbabaaabbabbaabaaabbbbaabababaaaabaaaabab`	`abba 7`
Sample input 8	**Sample output 8**
`bbbaaababbbabbbbbbabb`	`bbb 8`

Observation

Do not use `strings` nor any other massive data storage method. Read and treat the input character by character. Please, try to avoid carrying on reading the input when that is no longer necessary.

Problem information

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Generation: 2026-01-25T23:04:39.071Z