

Longest Repeating Subsequence

Given string str, find the length of the longest repeating subsequence such that it can be found twice in the given string.

The two identified subsequences A and B can use the same ith character from string str if and only if that ith character has different indices in A and B. For example, A = "xax" and B = "xax" then the index of first "x" must be different in the original string for A and B.

Example 1:

Input:

```
str = "axxzxy"
```

Output: 2

Explanation:

The given array with indexes looks like

```
a x x z x y
0 1 2 3 4 5
```

The longest subsequence is "xx".

It appears twice as explained below.

subsequence A

```
x x
0 1  <-- index of subsequence A
-----
1 2  <-- index of str
```

subsequence B

```
x x
0 1  <-- index of subsequence B
-----
2 4  <-- index of str
```

We are able to use character 'x'
(at index 2 in str) in both subsequences
as it appears on index 1 in subsequence A
and index 0 in subsequence B.

Example 2:

Input:

```
str = "axxxy"
```

Output: 2

Explanation:

The given array with indexes looks like

```
a x x x y
0 1 2 3 4
```

The longest subsequence is "xx".
It appears twice as explained below.

subsequence A

```
x x
0 1  <-- index of subsequence A
-----
1 2  <-- index of str
```

subsequence B

```
x x
0 1  <-- index of subsequence B
-----
2 3  <-- index of str
```

We are able to use character 'x'
(at index 2 in str) in both subsequences
as it appears on index 1 in subsequence A
and index 0 in subsequence B.

Your Task:

You don't need to read or print anything. Your task is to complete the **LongestRepeatingSubsequence()** which takes str as input parameter and returns the length of the longest repeating subsequence.

Expected Time Complexity: $O(n^2)$

Expected Space Complexity: $O(n^2)$

Constraints:

$1 \leq |str| \leq 10^3$