

# 1898. Maximum Number of Removable Characters

Medium

You are given two strings `s` and `p` where `p` is a **subsequence** of `s`. You are also given a **distinct 0-indexed** integer array `removable` containing `0-indexed` positions of characters in `s` that you are allowed to remove.

You want to choose an integer `k` ( $0 \leq k \leq \text{removable.length}$ ) such that, after removing `k` characters from `s` using the **first** `k` indices in `removable`, `p` is still a **subsequence** of `s`.

Return the **maximum** `k` you can choose such that `p` is still a **subsequence** of `s` after the removals.

A **subsequence** of a string is a new string generated from the original string with some characters (can be none) deleted without changing the relative order of the remaining characters.

### Example 1:

**Input:** `s = "abcbacab", p = "ab", removable = [3,1,0]`  
**Output:** `2`  
**Explanation:** After removing the characters at indices 3 and 1, "abcbacab" becomes "accb".  
"ab" is a subsequence of "accb".  
If we remove the characters at indices 3, 1, and 0, "abcbacab" becomes "ccb", and "ab" is no longer a subsequence.  
Hence, the maximum `k` is 2.

### Example 2:

**Input:** `s = "abcbddddd", p = "abcd", removable = [3,2,1,4,5,6]`  
**Output:** `1`  
**Explanation:** After removing the character at index 3, "abcbddddd" becomes "abcbddddd".  
"abcd" is a subsequence of "abcbddddd".

### Example 3:

**Input:** `s = "abcbab", p = "abc", removable = [0,1,2,3,4]`  
**Output:** `0`  
**Explanation:** If you remove the first index in the array `removable`, "abc" is no longer a subsequence.

### Constraints:

- $1 \leq p.length \leq s.length \leq 10^5$
- $0 \leq \text{removable.length} < s.length$
- $0 \leq \text{removable}[i] < s.length$
- `p` is a **subsequence** of `s`.
- `s` and `p` both consist of lowercase English letters.
- The elements in `removable` are **distinct**.

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Yes No

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