

028. Implement strStr()

027 Remove Element

- Two pointers+array

Description

Implement `strStr()`.

Return the index of the first occurrence of needle in haystack, or -1 if needle is not part of haystack.

Example 1:

```
Input: haystack = "hello", needle = "ll"
Output: 2
```

Example 2:

```
Input: haystack = "aaaaa", needle = "bba"
Output: -1
```

1. Thought line

1. if haystack is empty, return -1;
2. if needle is empty, return 0;

2. Two pointers+string

```
1 class Solution {
2 public:
3     int strStr(string haystack, string needle) {
4         if (needle.empty()) return 0;
5         if (haystack.empty()) return -1;
6
7         int n = haystack.size(), m = needle.size();
8         for (int i = 0; i <= n-m; ++i){
9             if (haystack[i] == needle[0]){
10                 bool find = true;
11                 for (int j = 0; find && j <= m-1; ++j){
12                     if (haystack[i+j] != needle[j]) find = false;
13                 }
14                 if (find) return i;
15             }
16         }
17         return -1;
18     }
19 };
```