

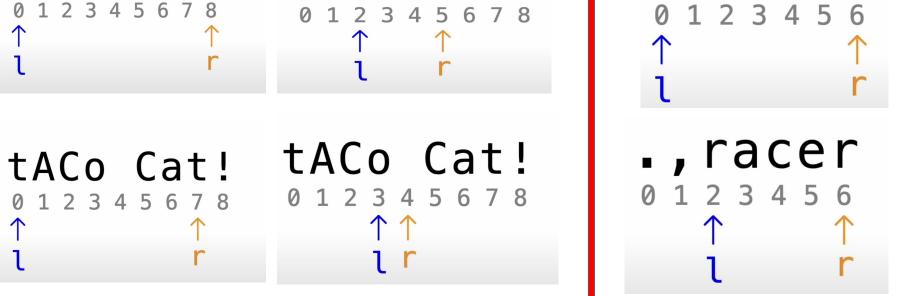
.isalnum()

is alphanumeric?

a-z, A-Z, 0-9

no
false

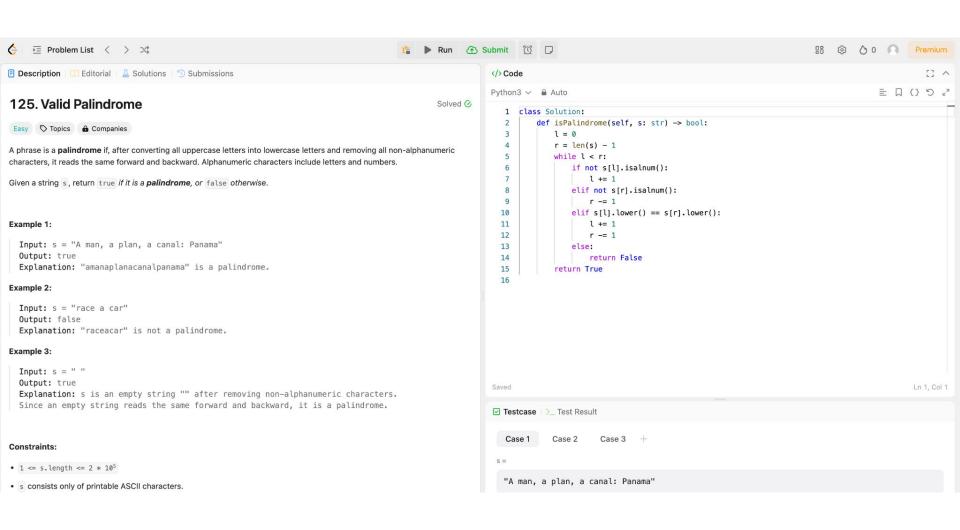
.lower() convert to lowercase string>

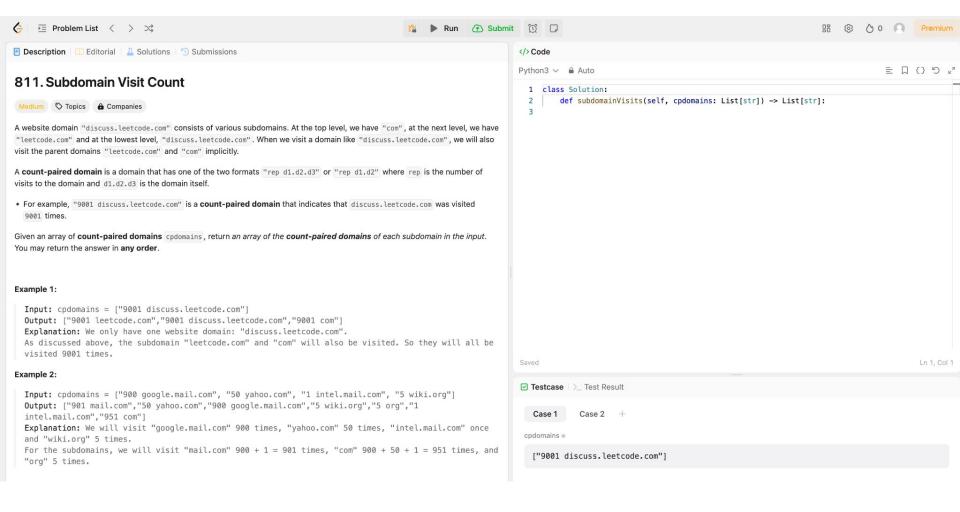


tACo Cat!

tACo Cat!

.,racer







</>Code



Medium ♥ Topics ♠ Companies

A website domain "discuss.leetcode.com" consists of various subdomains. At the top level, we have "com", at the next level, we have "leetcode.com" and at the lowest level, "discuss.leetcode.com". When we visit a domain like "discuss.leetcode.com", we will also visit the parent domains "leetcode.com" and "com" implicitly.

A **count-paired domain** is a domain that has one of the two formats "rep d1.d2.d3" or "rep d1.d2" where rep is the number of visits to the domain and d1.d2.d3 is the domain itself.

• For example, "9001 discuss.leetcode.com" is a **count-paired domain** that indicates that discuss.leetcode.com was visited 9001 times.

Given an array of **count-paired domains** cpdomains, return an array of the **count-paired domains** of each subdomain in the input. You may return the answer in **any order**.

## Example 1:

Input: cpdomains = ["9001 discuss.leetcode.com"]
Output: ["9001 leetcode.com", "9001 discuss.leetcode.com", "9001 com"]
Explanation: We only have one website domain: "discuss.leetcode.com".
As discussed above, the subdomain "leetcode.com" and "com" will also be visited. So they will all be visited 9001 times.

## Example 2:

intel.mail.com","951 com"]
Explanation: We will visit "google.mail.com" 900 times, "yahoo.com" 50 times, "intel.mail.com" once
and "wiki.org" 5 times.
For the subdomains we will visit "mail.com" 900 + 1 = 901 times "com" 900 + 50 + 1 = 951 times are

Input: cpdomains = ["900 google.mail.com", "50 yahoo.com", "1 intel.mail.com", "5 wiki.org"]
Output: ["901 mail.com", "50 yahoo.com", "900 google.mail.com", "5 wiki.org", "5 org", "1

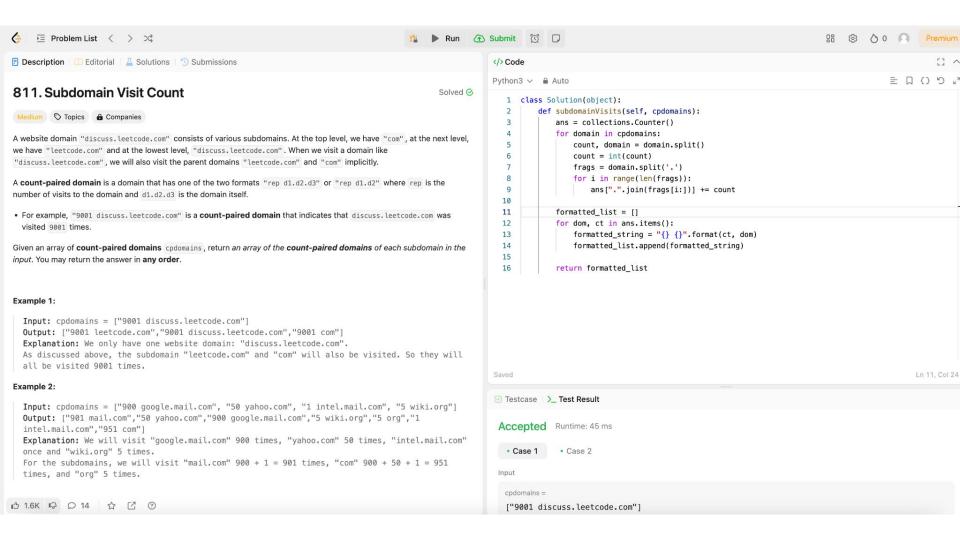
For the subdomains, we will visit "mail.com" 900 + 1 = 901 times, "com" 900 + 50 + 1 = 951 times, and "org" 5 times.

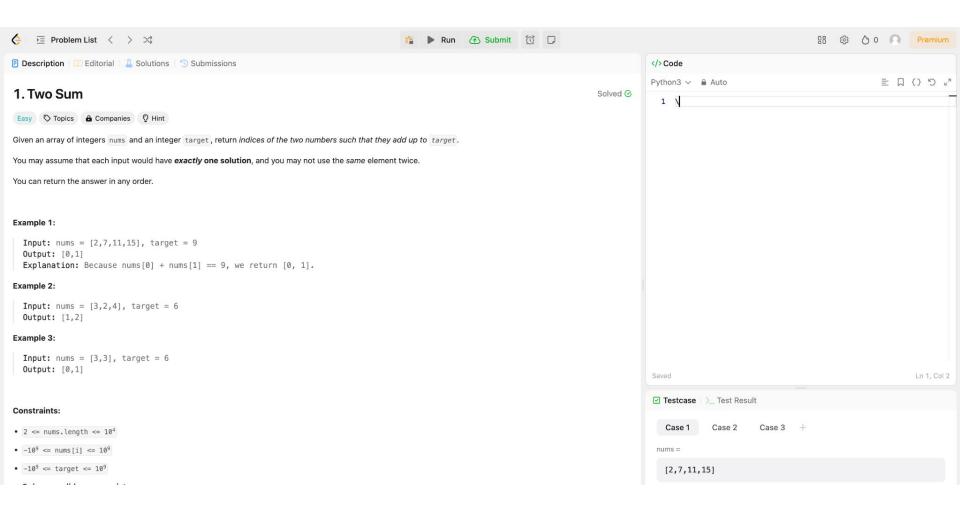
```
"900 google.mail.com", "50 yahoo.com", "1 intel.mail.com", "5 wiki.org"]
```

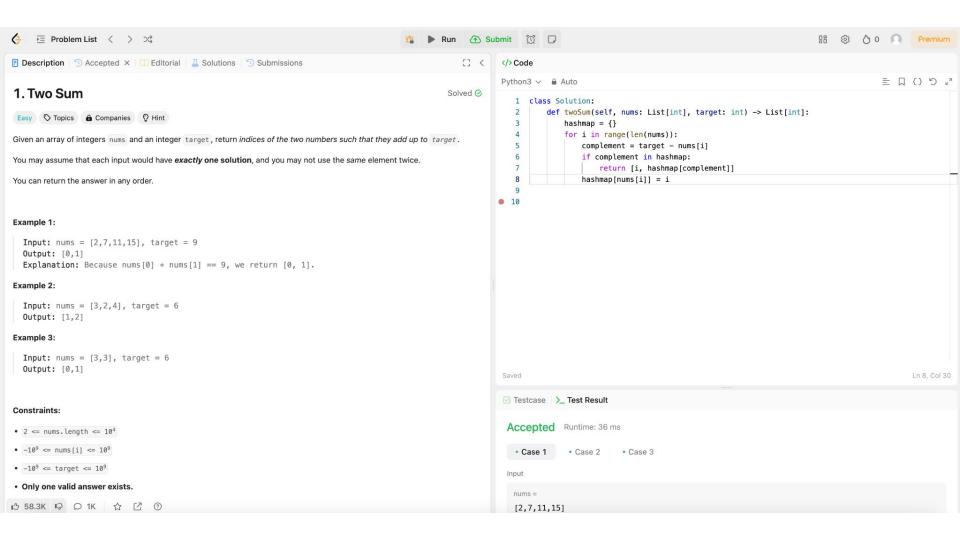
-> count 900 and the domain google.mail.com

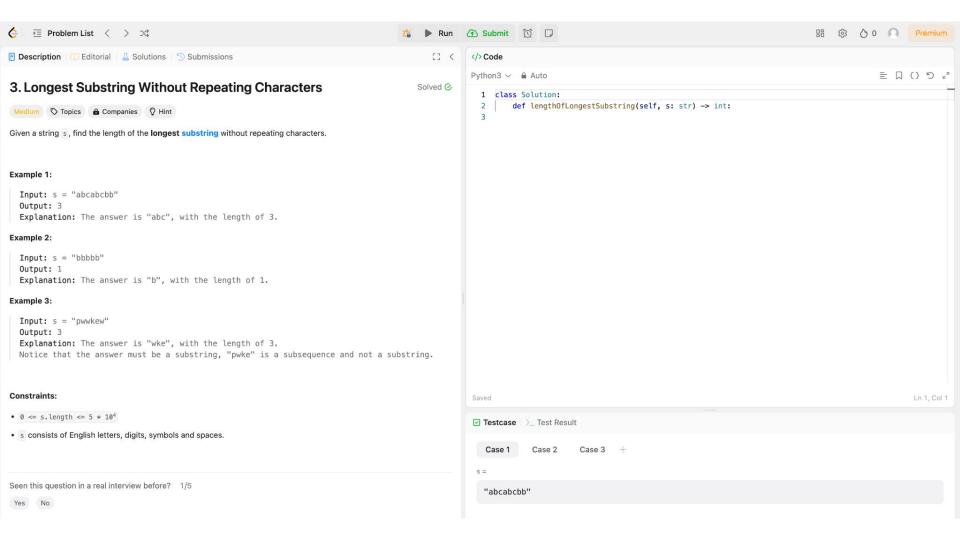
```
"mail.com": 900
"com": 900
"50 yahoo.com": 1
"com": 950
"intel.mail.com": 1
"com": 951
"wiki.org": 5
"org": 5
```

"google.mail.com": 900

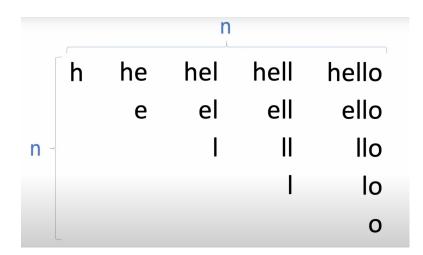


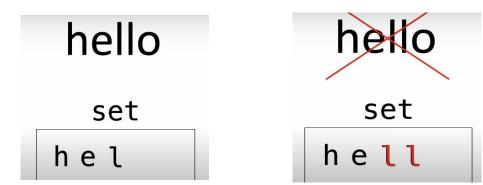






Input - Hello Output - Hel



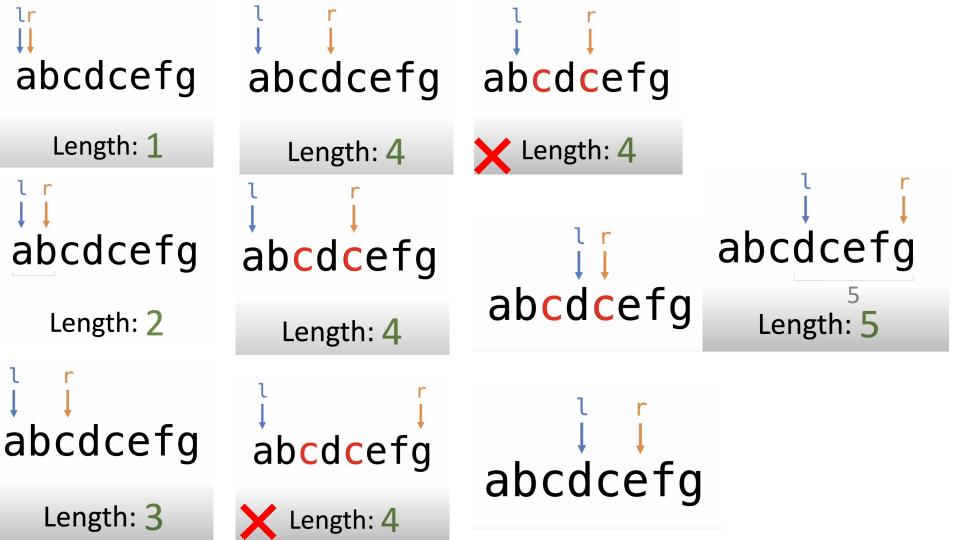


Each check runs in O(n) time

 Must do this for each substring generated, which took O(n²) time

Brute force: O(n³) time!!

Q - How can we Optimize?



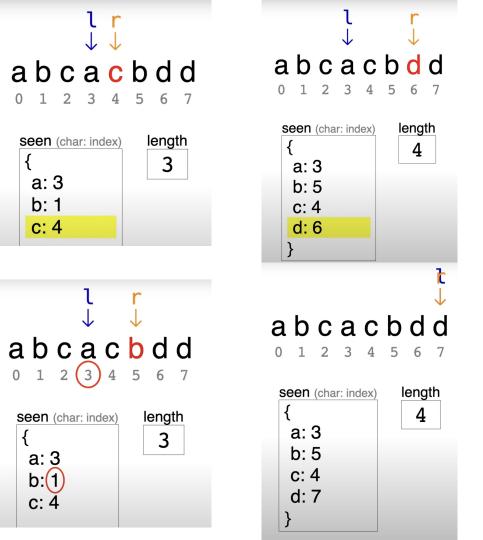
Algorithm - Keep moving the right pointer to extend the substring until we reach a repeated character. At that point, move the left pointer up until the repeated character is gone. We keep repeating the character until the right pointer reaches the end of the string.

How do we know where to update the left pointer when a repeated character is found?

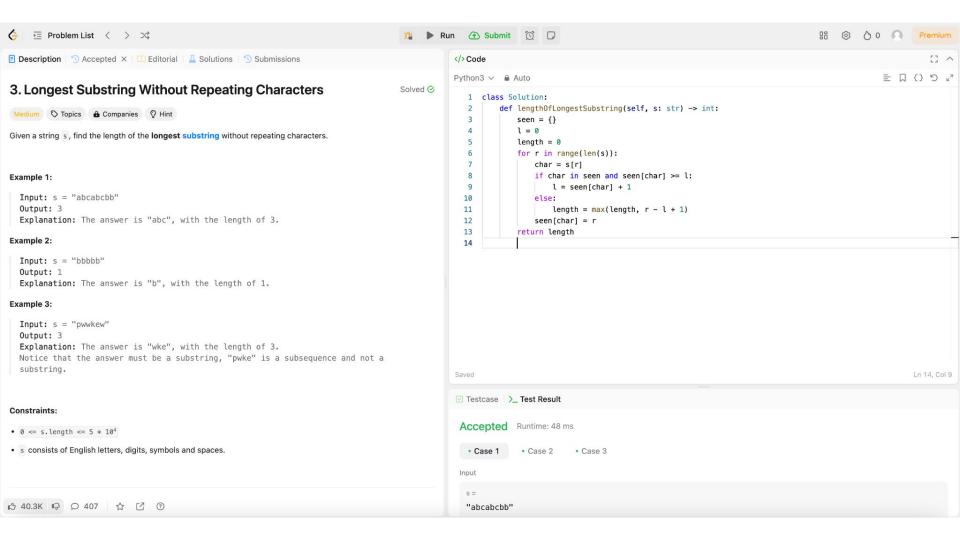
```
abcacbdd abcacbdd
   1 2 3 4 5 6 7
                                      length
              length
                        seen (char: index)
 seen (char: index)
                3
                                       3
  a: 0
                          a: 3
                          b: 1
  b: 1
                          c: 2
  c: 2
abcacbdd abcacbdd
     2 3 4 5 6 7
                                      length
              length
 seen (char: index)
                         seen (char: index)
                                       3
                          a: 3
  a: 0
  b: 1
                          b: 1
  c: 2
                          c: 4
```

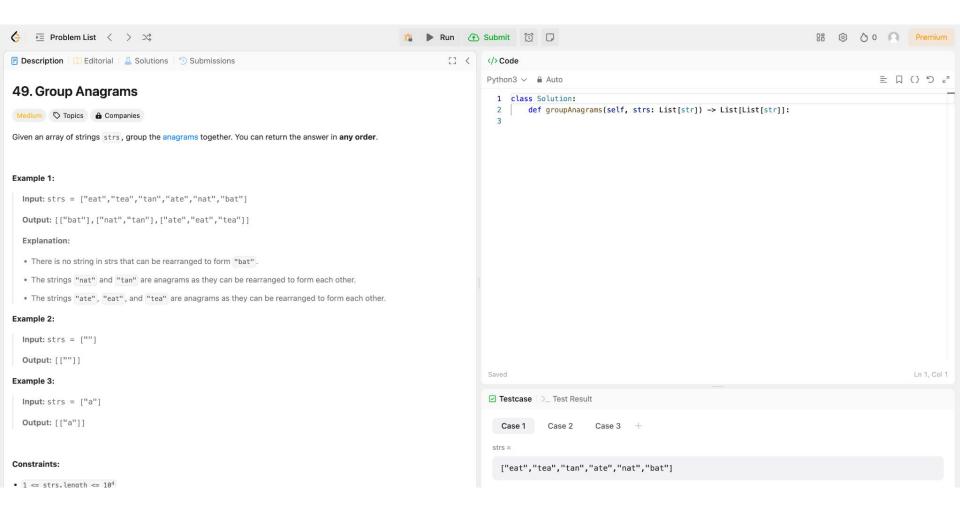
```
# Given a string s, find the length
# of the longest substring without
# repeating characters
def lengthOfLongestSubstring(s):
  seen = \{\}
  1 = 0
  length = 0
  for r in range(len(s)):
    char = s[r]
    if char in seen and seen[char] >= l:
      l = seen[char] + 1
    else:
      length = \max(length, r - l + 1)
    seen[char] = r
```

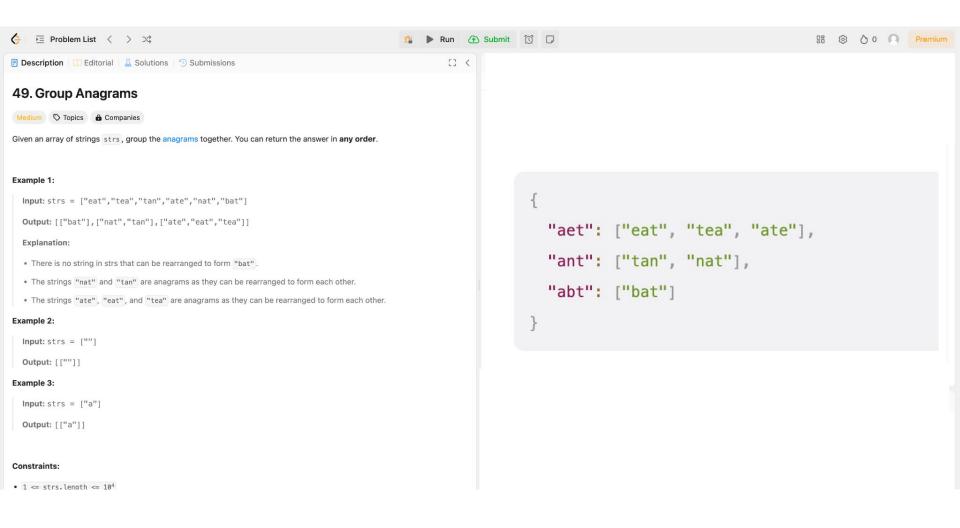
return length

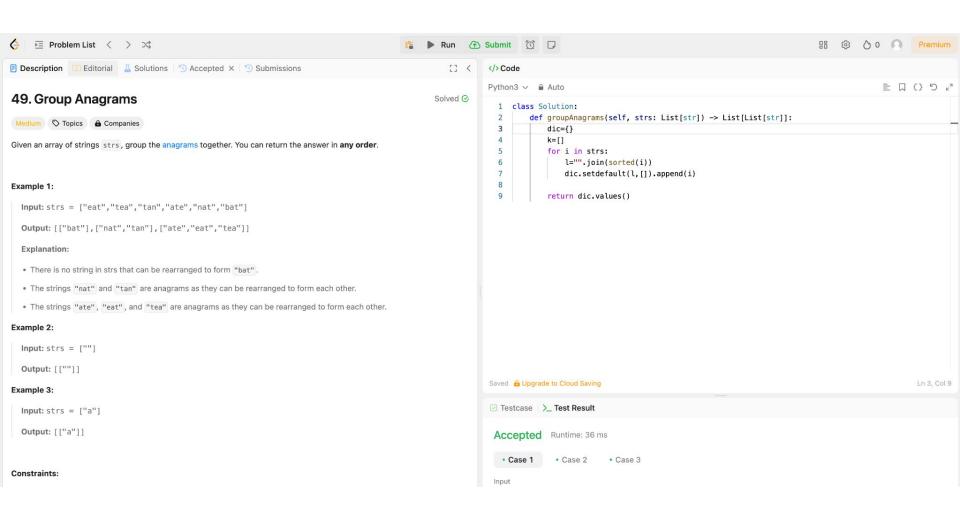


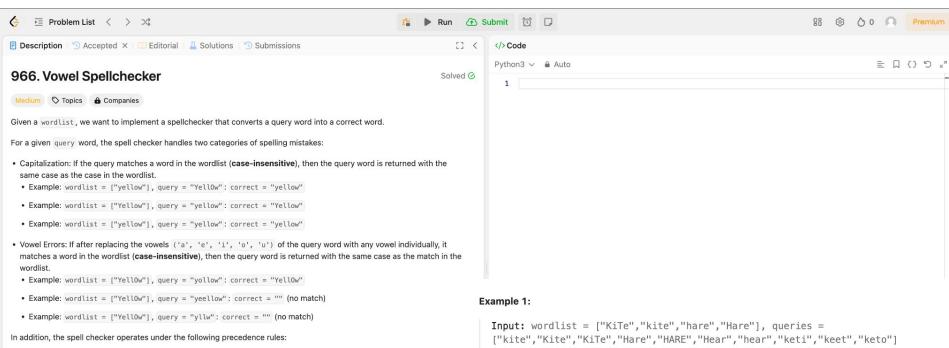
```
# Given a string s, find the length
# of the longest substring without
# repeating characters
def lengthOfLongestSubstring(s):
  seen = \{\}
  1 = 0
  length = 0
  for r in range(len(s)):
    char = s[r]
    if char in seen and seen[char] >= l:
      l = seen[char] + 1
    else:
      length = max(length, r - l + 1)
    seen[char] = r
  return length
```











- . When the guery exactly matches a word in the wordlist (case-sensitive), you should return the same word back.
- When the guery matches a word up to capitlization, you should return the first such match in the wordlist.
- When the guery matches a word up to vowel errors, you should return the first such match in the wordlist.
- . If the query has no matches in the wordlist, you should return the empty string.

Given some queries, return a list of words answer, where answer[i] is the correct word for query = queries[i].

```
Output: ["kite","KiTe","KiTe","Hare","hare","","","KiTe","","KiTe"]
```

## Example 2:

```
Input: wordlist = ["vellow"]. gueries = ["Yellow"]
Output: ["vellow"]
```

