

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 #include <vector>
4 #include <algorithm>
5 #include <unordered_map>
6
7 using namespace std;
8
9 struct stringChain {
10     string nextString;
11     int maxChainLength;
12 };
13
14 void findLongestStringChain(string str,
15                             unordered_map<string, stringChain> &stringChains) {
16     string getSmallerString(string str, int index);
17     void tryUpdateLongestStringChain(
18         string currentString, string smallerString,
19         unordered_map<string, stringChain> &stringChains);
20     vector<string>
21     buildLongestStringChain(vector<string> strings,
22                             unordered_map<string, stringChain> stringChains);
23
24     // O(n * m^2 + nlog(n)) time | O(nm) space - where n is the number of
25     // and m is the length of the longest string
26     vector<string> longestStringChain(vector<string> strings) {
27         // For every string, imagine the longest string chain that starts with it
28         // Set up every string to point to the next string in its respective
29         // string chain. Also keep track of the lengths of these longest string
30         // chains.
31         unordered_map<string, stringChain> stringChains = {};
32         for (auto string : strings) {
33             stringChains[string] = {"", 1};
```

Solution 1

Solution 2

Solution 3

```
1 #include <vector>
2
3 using namespace std;
4
5 vector<string> longestStringChain(vector<string> strings) {
6     // Write your code here.
7     return {};
8 }
9
```

Our Tests

Custom Output

Submit Code

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