

// Longest Common Prefix in an Array

// Given a array of N strings, find the longest common prefix among all strings present in the array.

// Expected Time Complexity: $O(N * \max(|arr_i|))$.

// Expected Auxiliary Space: $O(\max(|arr_i|))$ for result.

Idea: First, find the maximum length string in the array and store it in a variable s. Then, traverse the array, when you find that s is not equal to the an element, compare the substring equal to the s's length from 0th index, if it is also not equal to s...then, start from the last letter of s and reduce its size whenever the corresponding letter (same index letter) is not equal to it.

A while loop will be inside a for loop. Because the while loop will only traverse the letters of a string, it will not hamper the time complexity.

