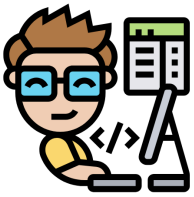

DAILY PROGRAMMING
CHALLENGE

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Longest Common Prefix

You are given an array of strings strs[], consisting of lowercase letters. Your task is to find the longest common prefix shared among all the strings. If there is no common prefix, return an empty string "".
A common prefix is a substring that appears at the beginning of all the strings in the array. The task is to identify the longest such prefix that all strings share.

Input:
An array of strings strs[] where each string consists of lowercase English letters.

Output:

- A string representing the longest common prefix. If no common prefix exists, return an empty string "".

Examples:

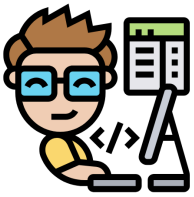
- Example 1
  Input: strs[] = ["flower", "flow", "flight"]
  Output: "fl"
  Explanation: The longest common prefix among the strings "flower", "flow", and "flight" is "fl".
- Example 2
  Input: strs[] = ["dog", "racecar", "car"]
  Output: ""
  Explanation: There is no common prefix among the strings "dog", "racecar", and "car", so the output is an empty string.

Constraints:

- 1 ≤ strs.length ≤ 200 (The array can contain up to 200 strings)
- 0 ≤ strs[i].length ≤ 200 (Each string can be up to 200 characters long)
- All strings in strs[] consist of lowercase English letters.

Test Cases:

1. Input: strs[] = ["flower", "flow", "flight"]
   Output:



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2. Input: strs[] = ["dog", "racecar", "car"]
   Output: ""
3. Input: strs[] = ["apple", "ape", "april"]
   Output: "ap"
4. Input: strs[] = [""]
   Output: “”
5. Input: strs[] = ["alone"]
   Output: "alone"

Edge Cases:

1. Empty array: If the array is empty, the output should be an empty string.
2. Single string: If the array contains only one string, the output should be the string itself.
3. No common prefix: If the strings have no common prefix, return an empty string.