

Top-20 Training Program (Basic Thinking)

Apply basic commonsense/math/data structures to solve the following problems.

Problem1: Cyclic Permutation Check

Find an efficient function that takes two strings, say s1 and s2, as input and returns true if s2 is a cyclic permutation of s1?

Function Prototype:

```
boolean isCyclicPerm(char[] s1, char[] s2)
```

Example1

Input: s1= "ABCD" s2= "CDAB"

Output: true

Example2

Input: s1= "ABCD" s2= "ACBD"

Output: false

Problem2: Removing the mystery length

Given an array of alpha-numeric characters with the length appended to the string, write an efficient function to remove the length part of it.

Function Prototype:

```
void remLength(char [ ]s)
```

Example

Input: JamesBond00712

where, 12 is length of string JamesBond007

Output: JamesBond007

Problem3: Reverse words of a string

Write a function to reverse the words of given sentence. Modify the input array in-place.

Function Prototype:

```
void reverseWords(char[ ] s)
```

Example

Input: India is Best

Output: Best is India

Problem4: Anagram Discovery

a) Write a function to determine whether the given two strings are anagrams or not. Your function should return boolean response.

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b) Write a function to find the number of distinct anagrams in a given dictionary. Your code should read the dictionary file as input.

