Experiment 2

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Section/Group: DM 714-A

Subject: Competitive Coding II

Semester: 6th

Date of Performance: 24/02/2023

Aim:

Strings

Problem 1: Rotate String

Given two strings s and goal, return true if and only if s can become goal after some number of shifts on s.

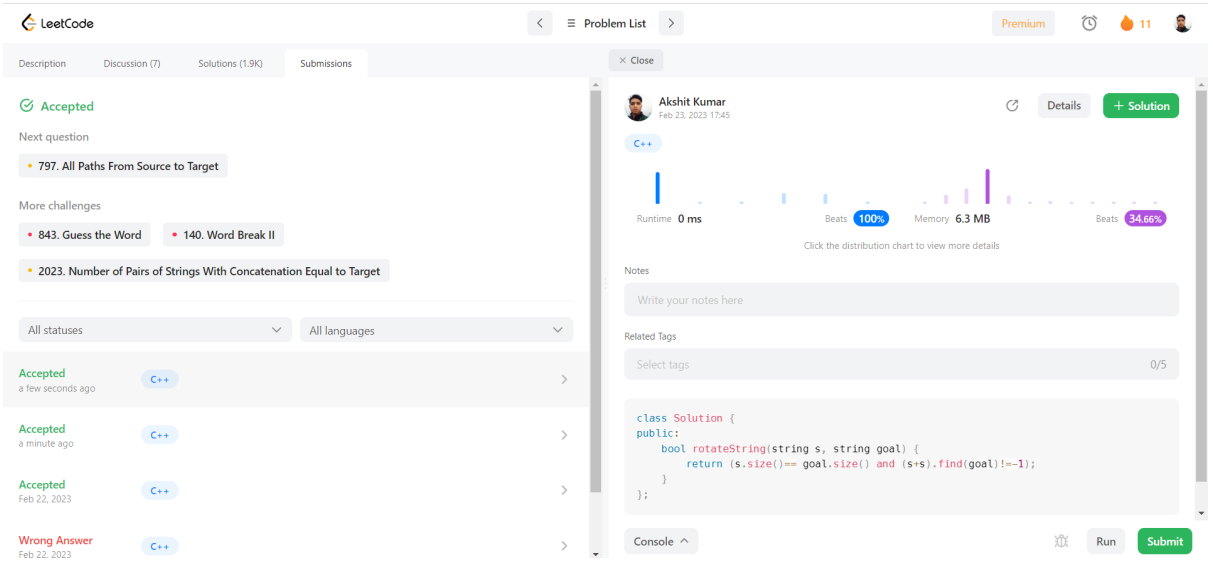
A shift on s consists of moving the leftmost character of s to the rightmost position.

For example, if s = "abcde", then it will be "bcdea" after one shift.

Code:

```
class Solution {

public:

    bool rotateString(string s, string goal) {

        return (s.size()== goal.size() and (s+s).find(goal)!=-1);

    }

};
```

Output:



Problem 2: Find the Index of the First Occurrence in a String

Given two strings needle and a haystack, return the index of the first occurrence of a needle in a haystack, or -1 if the needle is not part of the haystack.

Code:

```
class Solution {

public:

    int strStr(string haystack, string needle) {

        int m = needle.length();

        int n = haystack.length();


        for (int windowStart = 0; windowStart <= n - m; windowStart++) {

            for (int i = 0; i < m; i++) {

                if (needle[i] != haystack[windowStart + i]) {

                    break;

                }
```

```
                if (i == m - 1) {
                    return windowStart;
                }
            }
        }

        return -1;
    }
};
```

Output: