**Data Structure Lab**

**ODD 2022**

**Lab Test-1**

**Time: 40 min**

**Marks: 20**

1. Submit a word file having code and output screenshots
2. Filename should be RollNo\_Name\_LabTest1\_DS.pdf
3. Output should be at least 3 unique test cases
4. Output Screenshot should NOT be cropped at all
5. Any two students having same output will be awarded 0 marks

**Set 1 ODD System No**

Q1 Given a string str, the task is to find the lexicographically smallest string that can be formed by removing at most one character from the given string.

Example 1:

Input: abczd

Output: abcd

Example 2:

Input: abcda

Output: abca

Explanation:

One can remove d to get abca which is the lexicographically smallest string possible.

**Set 2 (Even System No)**

Q1 Given a string S and an integer K.

Choose one of the first K letters of S and append it at the end of the string. You can apply this operation as many times as he wants. Return the lexicographically smallest string you could have after applying the mentioned step any number of moves.

**Input:** S = "cba", k = 1

**Output:** "acb"

**Explanation:**Moving the 1stcharacter'c' to last, we get the string "bac".

Similarly, moving the first character 'b' in the new string to the last we obtain "acb".

**Input:** s = "baaca", k = 3

**Output:** "aaabc"

**Explanation:**Moving the 1st character 'b' to last, we get the string "aacab".

Similarly, moving the first character 'c' in the new string to the last we obtain "aaabc".