Set A

Online 3

CSE 2218/CSI 228 (B): Algorithms Laboratory/Data Structure and Algorithms II Laboratory

Total marks: 10 **Time: 30 mins**

Instructions:

1. Do not adopt unfair means. **10 marks will be deducted from the final marks for adopting unfair means**.
2. No more than 40% marks for non-compilable codes.
3. Late Submission Not allowed.

Problem 1:

The backspace of the keyboard of Alice is malfunctioning (is not working properly). So, Alice decided not to use the keyboard instead, she wants to use a character '#' where she needs to use backspace. After that Alice will paste the text on an application and that application will give her the actual text considering the backspaces.

Can you please write the code for the logic of that application?

Sample Input 1: ACGT#CGAT##ACCTG

Sample output 1: ACGCGACCTG

Sample Input 2: Red LLL###Light, Gra#een#n Lie##ight

Sample Output 2: Red Light, Green Light

Problem 2:

There are **n** people standing in front of a ticket counter. You know the number of tickets each person wants who is standing in the line. But there is a rule that each person can't buy more than **k** tickets at a time. So, if the demand of a person is more than **k** then s/he needs to stand at the end of the line and maintain the rule of the line. You are given the number of people and their demands. You need to figure out how much time (**in minutes**) is required to serve all the people. The time needed to serve one person is **1 minute**.

First line of the input given **n** and **k**. In the second line of the input there are **n** integers representing the demand of each person for ticket.

Sample Input 1:

10 3

3 10 8 15 7 5 2 1 6 9

Sample Output 1: 25

Sample input 2:

5 2

1 2 2 2 3

Sample Output 2: 6