# N Choose K

### **Objective**

To practice on writing **Recursive functions**.

### **Problem Description**

Find out all possible combinations of choosing **K** letters out of an input string of **N** distinct letters. The input consists of an integer, **K** and a string of **N** distinct lowercase letters listed in alphabetical order.

Assume that  $1 \le \mathbf{N} \le 16$  and  $1 \le \mathbf{K} \le \mathbf{N}$ . Print out all distinct letter combinations in alphabetical order: every combination can be represented as a string consisting of  $\mathbf{K}$  letters listed in alphabetical order.

#### Input

The input consists of an integer **K** and **N** distinct letters listed in alphabetical order.

### Output

Output all distinct letter combinations in alphabetical order.

#### Sample Input 1

2 abcd

### Sample Output 1

ab

ac

ad

bс

bd

cd

# Sample Input 2

4 abcd

# Sample Output 2

abcd

### **Program Submission**

Submit your solution as a file named Lab10g<LabGroupNo><MatricNo>.zip into the right folder.