**Practice Exercise #40: N Choose K**

<http://www.comp.nus.edu.sg/~cs1020/4_misc/practice.html>

**Objective:**

* Using recursion

**Task statement:**

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 ≤ ***N***≤ 16 and 1 ≤ ***K***≤ ***N***. Print out all distinct letter combinations in alphabetical order: every combination can be represented as a string consisting of ***K*** letters listed in alphabetical order.

**Input**

The input consists two lines. The first line contains an integer ***K*** and the second line contains ***N*** distinct lowercase letters listed in alphabetical order.

(In your program, you should use more descriptive variable names instead of ***K*** and ***N*** and follow Java naming convention.)

**Output**

Output all distinct letter combinations in alphabetical order.

**Sample Input #1**

**2**

**abcd**

**Sample Output #1**

**ab**

**ac**

**ad**

**bc**

**bd**

**cd**

**Sample Input #2**

**4**

**abcd**

**Sample Output #2**

**abcd**

**Sample Input #3**

**1**

**abcd**

**Sample Output #3**

**a**

**b**

**c**

**d**