## Problem

[itertools.permutations(iterable[, r])](https://docs.python.org/2/library/itertools.html#itertools.permutations)

This tool returns successive r length permutations of elements in an iterable.

If r is not specified or is None, then r defaults to the length of the iterable, and all possible full length permutations are generated.

Permutations are printed in a lexicographic sorted order. So, if the input iterable is sorted, the permutation tuples will be produced in a sorted order.

**Sample Code**

>>> from itertools import permutations

>>> print permutations(['1','2','3'])

<itertools.permutations object at 0x02A45210>

>>>

>>> print list(permutations(['1','2','3']))

[('1', '2', '3'), ('1', '3', '2'), ('2', '1', '3'), ('2', '3', '1'), ('3', '1', '2'), ('3', '2', '1')]

>>>

>>> print list(permutations(['1','2','3'],2))

[('1', '2'), ('1', '3'), ('2', '1'), ('2', '3'), ('3', '1'), ('3', '2')]

>>>

>>> print list(permutations('abc',3))

[('a', 'b', 'c'), ('a', 'c', 'b'), ('b', 'a', 'c'), ('b', 'c', 'a'), ('c', 'a', 'b'), ('c', 'b', 'a')]

**Task**

You are given a string S.  
Your task is to print all possible permutations of size k of the string in lexicographic sorted order.

**Input Format**

A single line containing the space separated string S and the integer value k.

**Constraints**

0 <= k <= len(S)  
The string contains only *UPPERCASE* characters.

**Output Format**

Print the permutations of the string S on separate lines.

**Sample Input**

HACK 2

**Sample Output**

AC

AH

AK

CA

CH

CK

HA

HC

HK

KA

KC

KH

**Explanation**

All possible size 2 permutations of the string "**HACK**" are printed in lexicographic sorted order.

## Solution

# Enter your code here. Read input from STDIN. Print output to STDOUT

from itertools import permutations

S,K = input().split()

print(\*[''.join(i) for i in permutations(sorted(S),int(K))],sep='\n')