



itertools.permutations() ★

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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

$0 < k \leq \text{len}(S)$

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.

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Language

Python 3



```
1 # Enter your code here. Read input from STDIN. Print output to STDOUT
2 from itertools import permutations
3
4 string, k = input().split()
5 k = int(k)
6 lst = sorted(list(permutations(string, k)))
7 for i in lst:
8     print("".join(i))
9
```

EMACS

Line: 9 Col: 1

Upload Code as File

☐

Test against custom input

Run Code

Submit Code

You have earned 10.00 points!

49/115 challenges solved.

43%



Congratulations

You solved this challenge. Would you like to challenge your friends?

Next Challenge

Test case 0

Compiler Message

Test case 1

Success

Test case 2

Input (stdin)

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1 HACK 2

Test case 3

Test case 4

Expected Output

Download

1 AC
2 AH
3 AK
4 CA
5 CH
6 CK

Test case 5