# itertools.permutations() ★



Your itertools.permutations() submission got 10.00 points.

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itertools.permutations(iterable[, r])

Submissions

This tool returns successive  $m{r}$  length permutations of elements in an iterable.

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

Leaderboard

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.

Editorial 🖰

#### Sample Code

Problem

```
>>> 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  $\boldsymbol{S}$ .

Your task is to print all possible permutations of size  $m{k}$  of the string in lexicographic sorted order.

### **Input Format**

A single line containing the space separated string  $m{S}$  and the integer value  $m{k}$ .

#### Constraints

# $0 < k \leq len(S)$

The string contains only UPPERCASE characters.

# Output Format

Print the permutations of the string  $m{S}$  on separate lines.

### Sample Input

HACK 2

## Sample Output

 $\mathsf{AC}$ 

AH

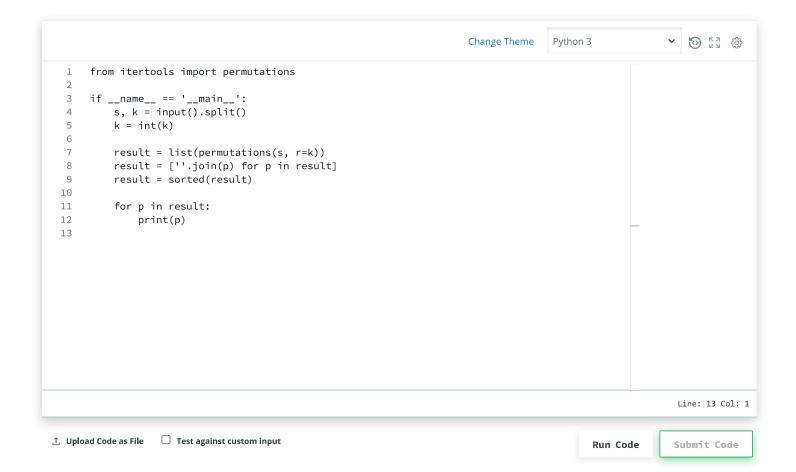
ΑK

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.
```



You have earned 10.00 points! 42/115 challenges solved.

37%



# Congratulations You solved this challenge. Would you like to challenge your friends? Next Challenge

 $\odot$  Test case 0

Compiler Message

⊗ Test case 1 🖰	Success		
⊗ Test case 2 🖰	Input (stdin)  1 HACK 2		Download
⊗ Test case 3 🖰			
⊗ Test case 4 🖰	Expected Output		Download
	1	AC	
⊗ Test case 5 🖰	2	АН	
	3	AK	
	4	CA	
	5	СН	
	6	ск	

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