

itertools.combinations_with_replacement()

Problem

Submissions

[itertools.combinations_with_replacement\(iterable, r\)](#)

This tool returns r length subsequences of elements from the input iterable allowing individual elements to be *repeated more than once*.

Combinations are emitted in lexicographic sorted order. So, if the input iterable is sorted, the combination tuples will be produced in sorted order.

Sample Code

```
>>> from itertools import combinations_with_replacement
>>>
>>> print list(combinations_with_replacement('12345',2))
[('1', '1'), ('1', '2'), ('1', '3'), ('1', '4'), ('1', '5'), ('2', '2'), ('2', '3'), ('2', '4'), ('2', '5'), ('3', '3'), ('3', '4'), ('3', '5'), ('4', '4'), ('4', '5'), ('5', '5')]
>>>
>>> A = [1,1,3,3,3]
>>> print list(combinations(A,2))
[(1, 1), (1, 3), (1, 3), (1, 3), (1, 3), (1, 3), (1, 3), (3, 3), (3, 3), (3, 3)]
```

Task

You are given a string S .

Your task is to print all possible size k replacement combinations of the string in lexicographic sorted order.

Input Format

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

Constraints

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

The string contains only *UPPERCASE* characters.

Output Format

Print the combinations with their replacements of string S on separate lines.

Sample Input

```
HACK 2
```

Sample Output

```
AA
AC
AH
AK
CC
CH
CK
HH
HK
KK
```

Contest ends in 1 day 6 hours 16 minutes 46 seconds

Submissions: 820

Max Score: 50

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Python 3  

```
1 from itertools import combinations_with_replacement
2 s,k = input().split(' ')
3 k = int(k)
4 s = [x for x in s]
5 s.sort()
6 l = list(combinations_with_replacement(s,k))
7 l.sort()
8 for i in l:
9     s = ''
10    for k in i:
11        s+=k
12    print(s)
```

Line: 12 Col: 13

 [Upload Code as File](#) ☐ Test against custom input

Run Code

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