

Words - K Selection - 3

1. You are given a word (may have one character repeat more than once). 2. You are given an integer k. 2. You are required to generate and print all ways you can select k characters out of the word. Note - > Use the code snippet and follow the algorithm discussed in question video. The judge can't force you but the intention is to teach a concept. Play in spirit of the question.

Constraints

$0 < \text{str.length}() < 15$ $0 < k \leq \text{str.length}()$

Format

Input

Input is managed for you

Output

Check the sample output and question video.

Example

Sample Input

aabbbccdde

3

aab aac aad aae abb abc abd abe acc acd ace add ade bbb bbc bbd bbe bcc bcd bce bdd bde ccd cce
cdd cde dde

```
import collections
def wordsKSelectionIII(s, k):
    fmap = collections.Counter(s)
    s = sorted(''.join(list(set(s))))
    ans = []
    helper(s, ans, fmap, 0, '', k)
    return ans

def helper(s, ans, fmap, idx, ssf, k):
    if k < 0:
        return
```

```
if idx==len(s):
    if k == 0:
        ans.append(ssf)
    return
ch = s[idx]
n = fmap[ch]
for i in range(n,-1,-1):
    temp = ''
    for j in range(i):
        temp+= ch
    helper(s,ans,fmap,idx+1,ssf+temp,k-i)
```

```
print(wordsKSelectionIII('aabbccdde',3))
```