## **Permutations Words-I**

- 1. You are given a word (may have one character repeat more than once).
- 2. You are required to generate and print all arrangements of these characters.

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.

**Input Format** 

Input is managed for you

Constraints

0 < str.length() <= 4

Sample Input

aabb

Sample Output

aabb

abab

abba

baab

baba

bbaa

```
def permutationWords1(string):
    freqmap = {}
    for ele in string:
        if ele in freqmap:
            freqmap[ele] = freqmap[ele] + 1
        else:
            freqmap[ele] = 1
    res = []
    r = len(string)
    permutationWordsUtil(freqmap, '', r, string, 0)

def permutationWordsUtil(freqmap, ssf, r, string, totalItems):
    if totalItems == r:
        print(ssf)
```

```
return
for key in freqmap.keys():
    if freqmap[key] > 0:
        freqmap[key] = freqmap[key] - 1
        permutationWordsUtil(freqmap, ssf + key, r, string, totalItems
+ 1)
    freqmap[key] = freqmap[key] + 1
```

When letters repeat then make sure you use a dictionary and then recur only on unique chararters