K Frequent Characters (28 July)
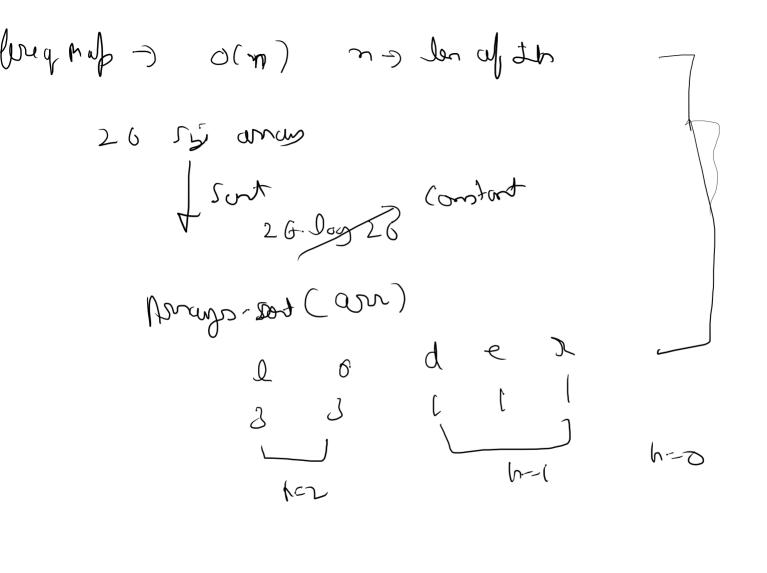
Eg Str = H e l o o . w o r l d l . $K = 2$

$h = 2$

H — 1   w — 1
e — 1   r — 1
l — 3   d — 1
o — 3

l o   d e h r w

1st high freq char — ,   2nd high freq — 2nd — 4th —

heloo worldl

d — 1   R — 3   w → 1
e — 1   o → 3
h — 1   r → 1

max Freq = 3 2 + 0

① ⓪

```java
int[] freqMap = getFreqMap(str); // contant 26 size array

int maxFreq = getMaxFreq(freqMap);
                    o > 0 ?        k > 0        k = x ≠ 0
while (k > 0) {

    boolean isFreqFound = false;
    for (int i = 0; i < freqMap.length; i++) {

        if (freqMap[i] == maxFreq) {
            char ch = getCharFromIdx(i); ⇐
            System.out.print(ch + " "); ⇐
            isFreqFound = true;
        }
    }
    maxFreq--;    hwro
    if (isFreqFound) {
        k--;
    }
}
```

freq map $\Rightarrow$ O(n) $n \to$ len of str

26 siz array

$\downarrow$ Sort

26. log 26   Constant

Arrays·sort (arr)

l   o   d   e   x

3   3   l   l   l

$h=2$ $h=1$ $h=0$

heloo   world

→h →1   l → 3
→e → 1   o → 3   ] 26 siy
→w → 1   constad
→x → 1
→d →1

                maxf = 3 x 1

check   ← flag = false x T
is found
maxf in fscup

l o h c
h~x l

whikh !=o){

max f---
if (flog==T)
h--i