

Q Longest Happy string.

$a=1, b=1, c=7$

ans \rightarrow c c a c c b c c

c c a c c b c c

To have the longest happy string, we want to greedily do 2 things:-

1. Use as many as possible char which has the max count.
2. To achieve ①, we need to have as many as much delimiters.

Q Least no. of unique intervals after k removals.

Eg: [4, 3, 1, 1, 3, 3, 2], k=3

ans \rightarrow 2 \rightarrow [1, 3]

① Count the occurrence of each no using Hash map

4	1
3	3
1	2
2	1

② Using array to count each occurrence

2 1 1

0 1 2 3 4 5 6 7

signifies that there are 2 ele with freq 1.

③ From small to big, for each unvisited least frequent element, deduct from k the multiplication with the no. of ele of same occurrence

\rightarrow If reaching 0, then deduct the corresponding unique count.

$$k - 2 = 3 - 2 = 1$$

Q Queue reconstruction by height

Greedy approach:

(h, k) with same h

(5, 0), (5, 1), (5, 2), (5, 3)

0 1 2 3

Input [7, 1], [6, 1], [7, 0]

[7, 0] [6, 1] [7, 1]

\rightarrow Sort the tallest guy in the ascending order by k-values and then insert them one by one into output queue. at the indexes equal to their k-values.

\rightarrow Take the next height in descending order and so on

[7, 0], [7, 1], [6, 1], [5, 0], [5, 2]

(4, 4)

[5, 0] [7, 0] [5, 2] [6, 1] [7, 1]