

for a normal stack we used array or linkedlist for the
internal implementation -

Max frequency stack

frequency map

max freq →

1 : 3
4 : 2
5 : 10
0 : 10

↪ elem : frequency of elem

↪ example of a
frequency map

→ In a frequency map, diff elements can posses diff frequency.

we are only concerned with the max frequency.

↳ we should maintain what is the max freq,
& what all elements have the max frequency.

→ # freq map → (value: freq)

max freq value → number

what all elements have the given freq. →
↗ frequency: [list of no. having them freq]

num(s)

5, 7, 5, 7, 4, 5
↑ ↑ ↑ ↑ ↑ ↑

← freq

O(1)

freq map

5: ~~1~~ ~~2~~ ~~3~~ ~~4~~ 1
7: ~~1~~ ~~2~~ 1
4: ~~1~~ 0

max freq

~~0~~ ~~1~~
~~2~~ ~~3~~ ~~4~~ 1

clear Map

↩

1: [5, 7,]

3

pop() → 5
pop() → 7
pop() → 5
pop() → 4

↪

↓
frequency map → holds the count freq of each element

max freq → this value tells max freq among all elements

element Map → holds a particular occurrence of the element.

↪
5 7 5 7 4 5
=

freq map

↪
5: 1 2 3 2 1
7: 1 2 1 2
4: 1 0
↪

max freq

0/1
2/3
1/2

element map

↪
1: [5, 7]
2: [7]

↪

pop() $\rightarrow 5$

pop() $\rightarrow 7$

pop() $\rightarrow 5$

pop() $\rightarrow 4$

push()

