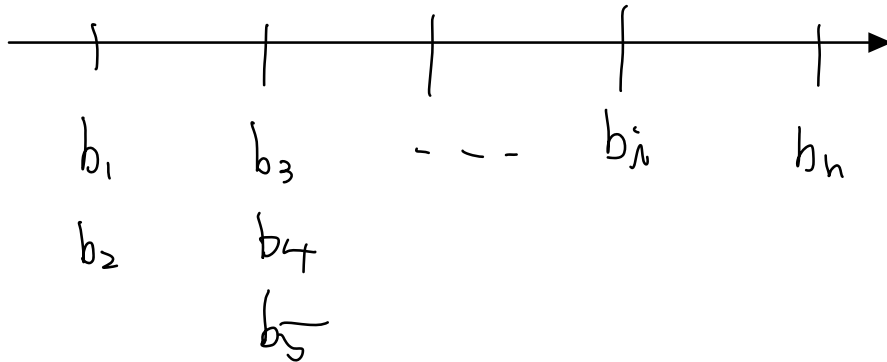
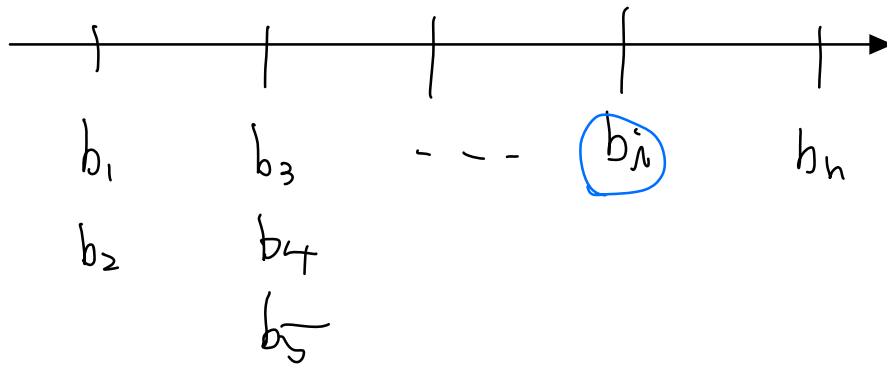


Re think:

Note: there might be duplicates

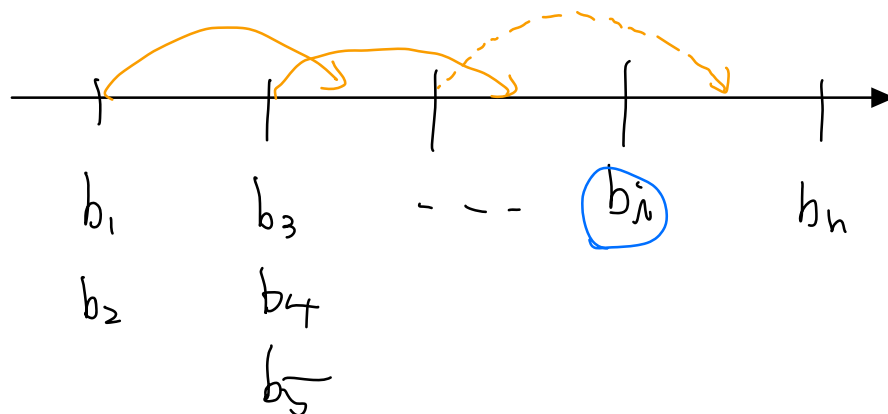


Assume $C_{\bar{n}}$ is the maximum



Choice 1: $C_{\bar{n}} = b_{\bar{n}} + 0$

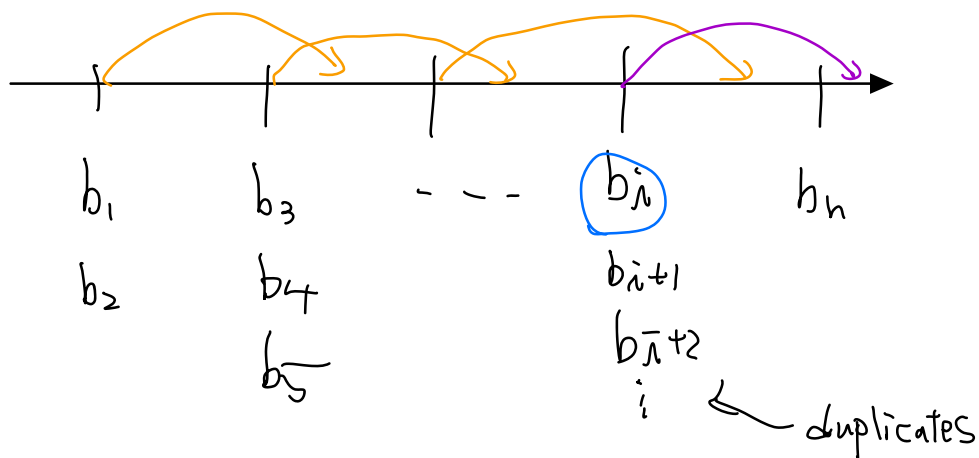
Observe



orange links represent add $2k$

also observe b_i is the maximum
so $b_{\bar{i}} = b_n$

Choice 2: $C_{\bar{i}} = b_{\bar{i}} + 2k$



Observe: b_i has to satisfy $b_{\bar{i}} + 2k \geq b_n$

also observe that for $b_j < b_i$

$$C_j = b_j + 2k$$

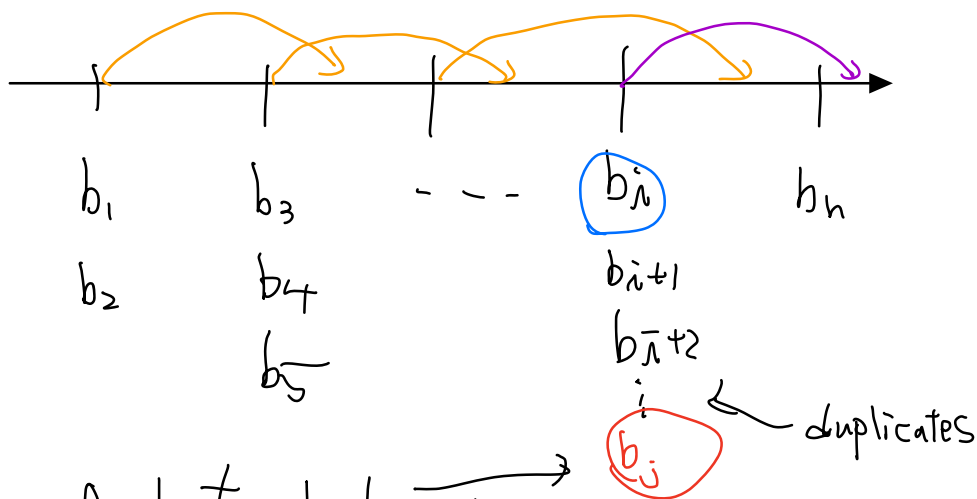
and the min should be next ($b_{\bar{i}}$)

NOTE: b_{i+1} might not be the new minimum

NOTE: For duplicates, we only see
the largest index
on the same value

Combined Choice 1, 2

we find out there is a "split"



And to deal with duplicates,
we just need to check this one
for the same value

Thinking process:


1. Each point can be the maximum
2. Identify \nwarrow pattern



3. Reverse thinking:
Just let every point be the split point

Even though that split point is not the maximum,

but we are sure maximum

must exist in that  pattern!