

$a_0 a_1 a_2 a_3 a_4 (a_5) a_6$



window of size K



$(0, t]$ $[t+1, 2t+1]$ $[2t+2, 3t+2]$

$t+1$ $t+1$ $t+1$

Thought 1:

Q: how do we choose the bucket size?

A: Set it $[0, t] \rightarrow$ can store $t+1$ elements

because if $a_i, a_j \in [0, t]$ we return True
else, check $\text{prev}([0, t])$
 $\text{next}([0, t])$

Q: What if a bucket contain 2 numbers?

A: If a bucket contain 2 numbers
we have already returned!

So it will not happen!, !, (, (,