

Bubble Sort

Selection sort

insertion sort

Quick sort

Counting sort

merge sort

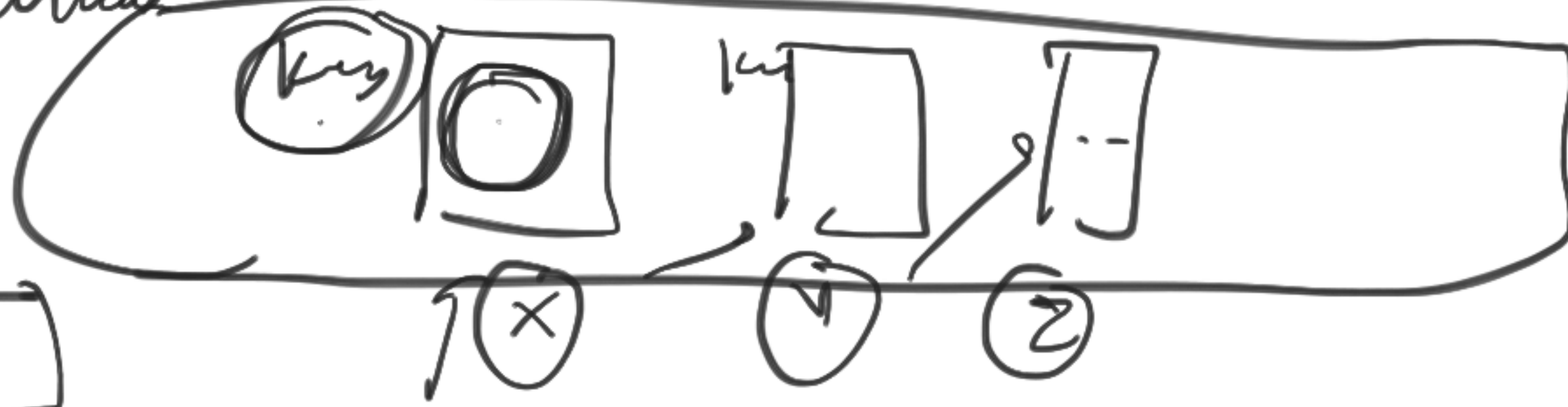


Stable



(R) → value

(K) →



Sliding window \Rightarrow window \Rightarrow variable

\Rightarrow window \Rightarrow fixed

Count distinct element

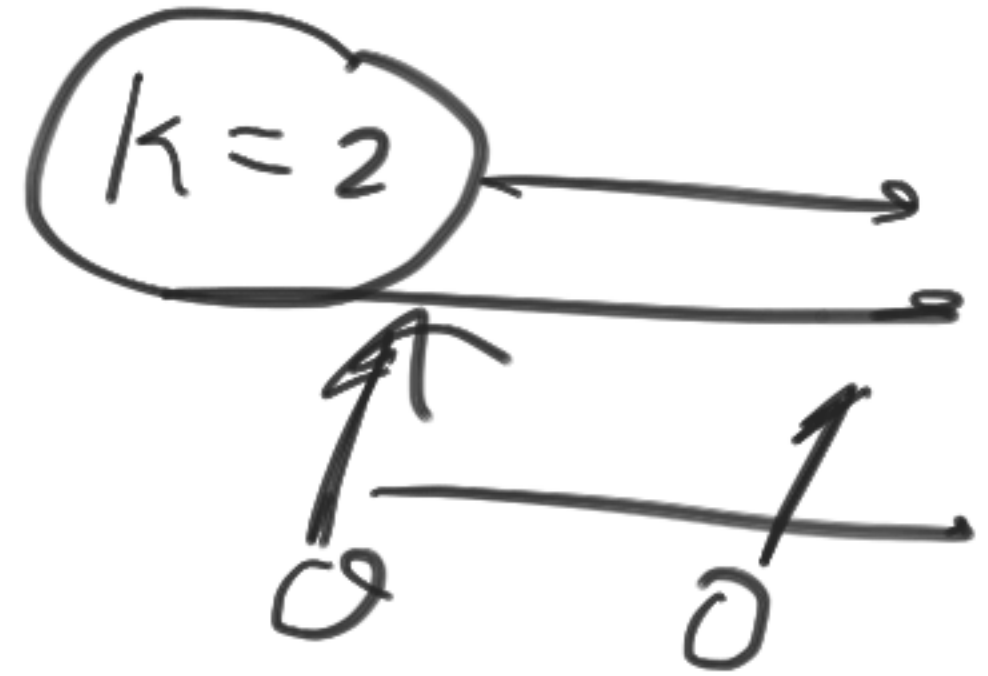
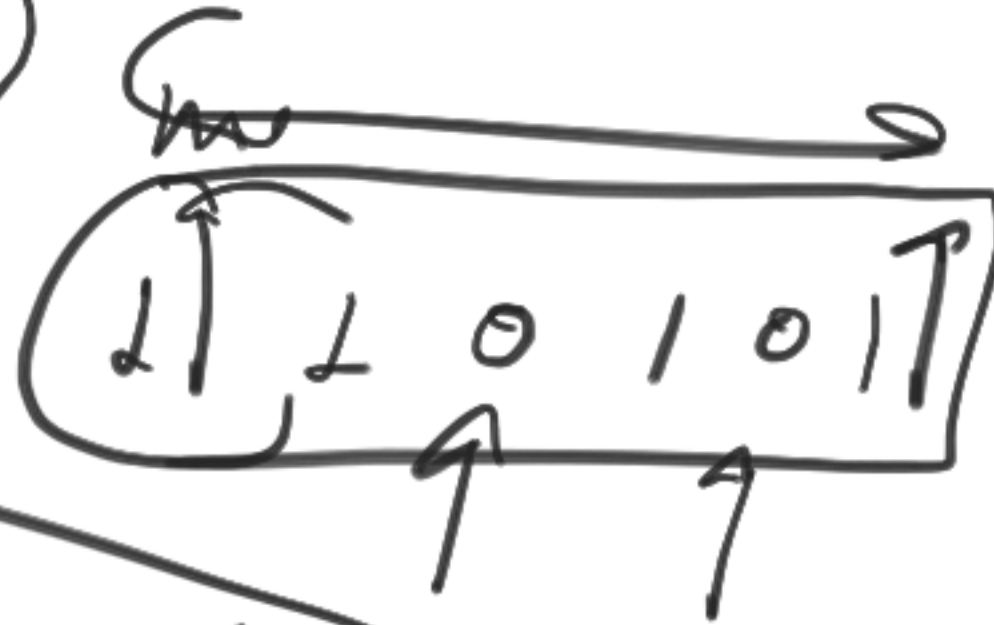
\Rightarrow

in every window of size k .

\Rightarrow max of every window of size k

\Rightarrow sliding window max

Max consecutive 1's. $\Rightarrow K \Rightarrow 0 \rightarrow 1$



min size subarray sum

target

\geq target



longest consecutive sequence



largest subarray with 0 sum



hashmap



Hash Table

$(n+1)$

largest subarray with equal no. of 0 and 1's

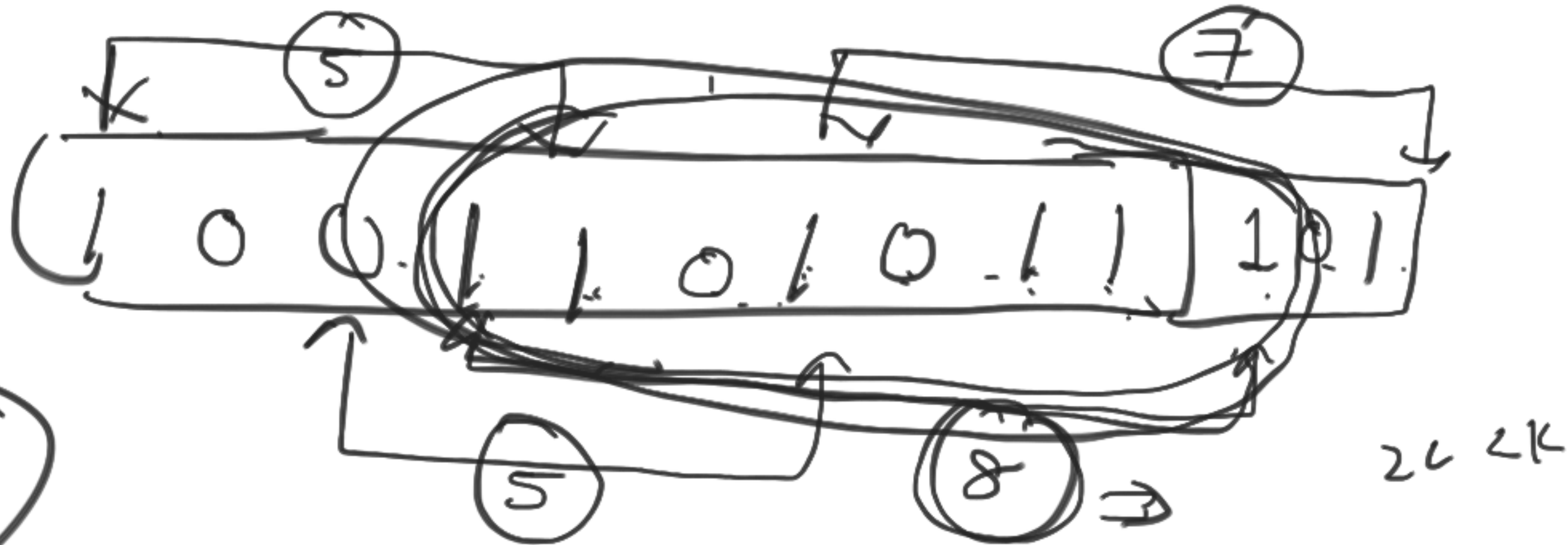


$-(n+1)$



\Rightarrow longest substring with

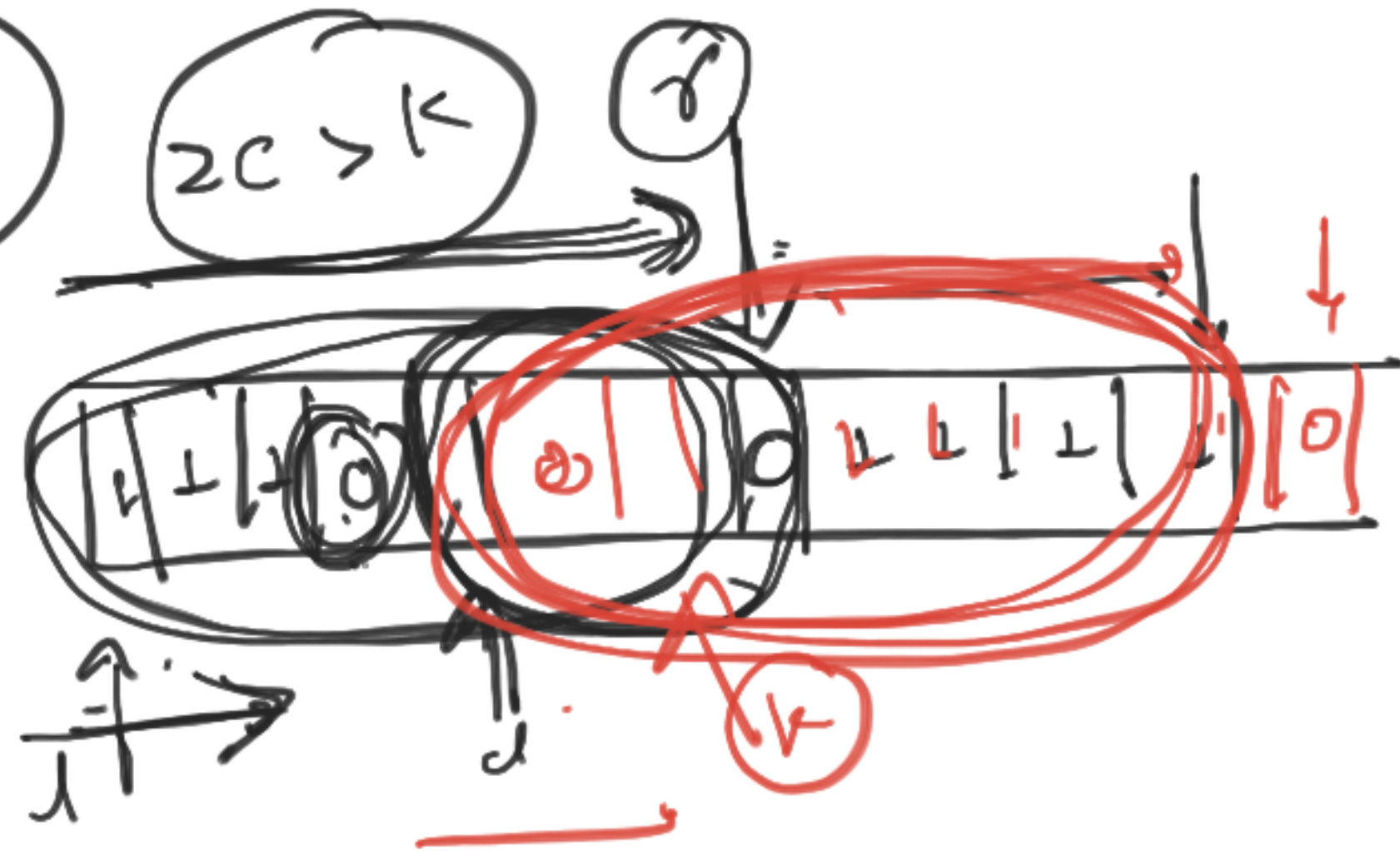
$k=2$

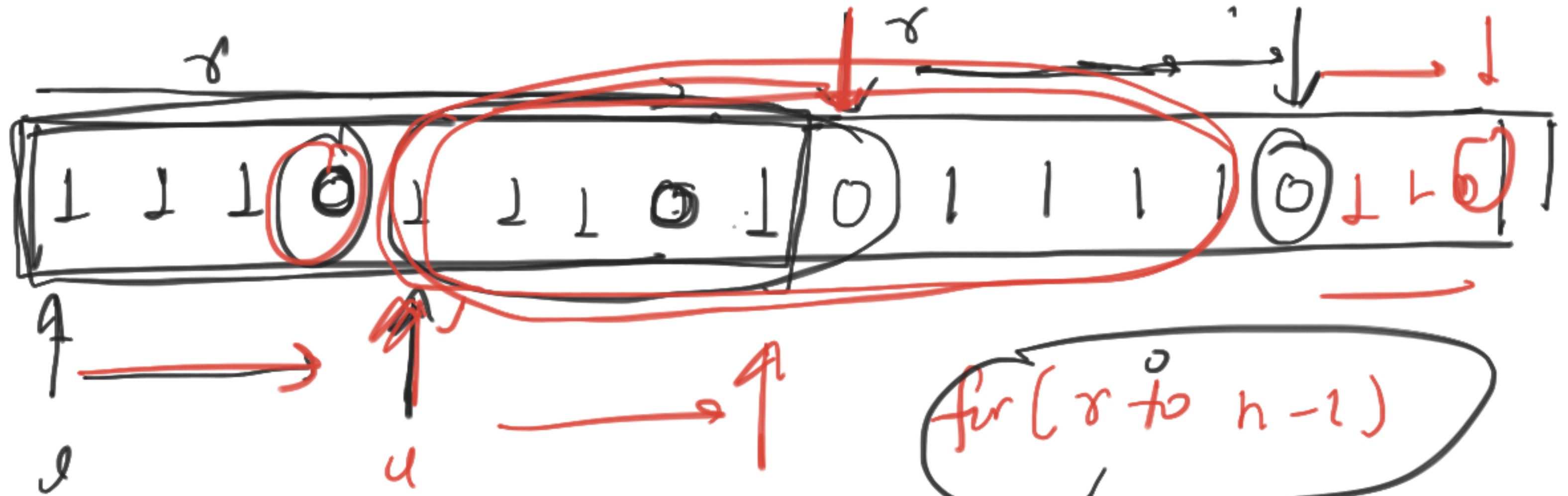


$\leq k$

$> k$

$2 \leq k$





$k=2$

max OneCount

\Rightarrow

for (x to n-1)

if (~~A~~ [x] == 0)

$zC = zC + 1$

if ($zC > k$)

{
:
}

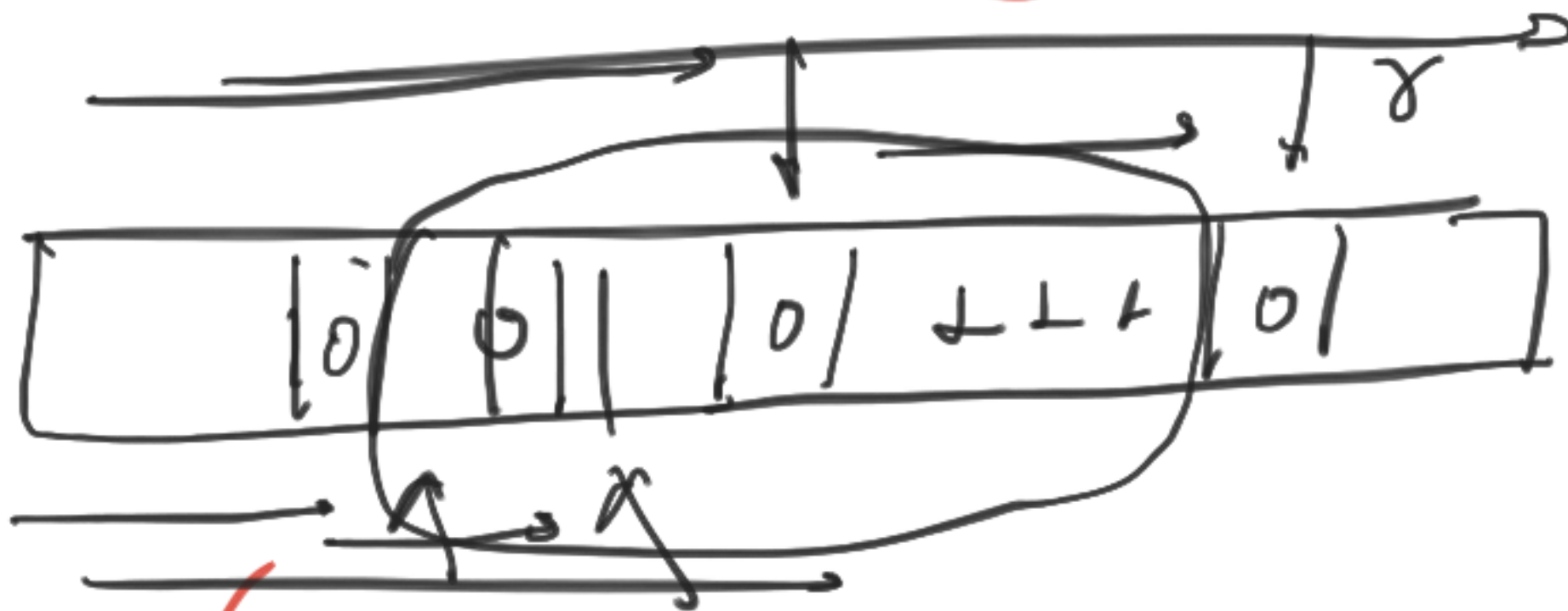
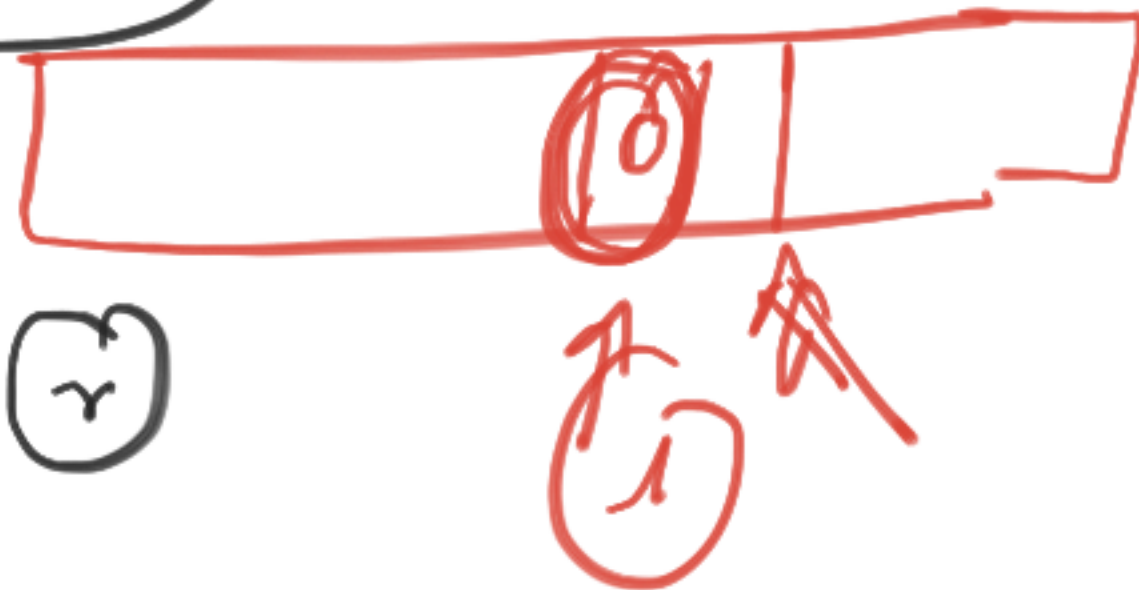
$$\left(\begin{array}{l} \text{while}(x[i] == 1) \\ \quad i = i + 1 \end{array} \right)$$
$$l = l + 1$$
$$2C = 2C - 1$$
$$l = l + 1$$

3

$$\text{max one count} = \max(\text{max one count}, \sigma - l + 1)$$

3. return maxOneOut

$O(n)$



for ($x = 0$ to $n-1$)

{ if ($A[x] \neq 0$)

$zc++$

if ($zc > k$)

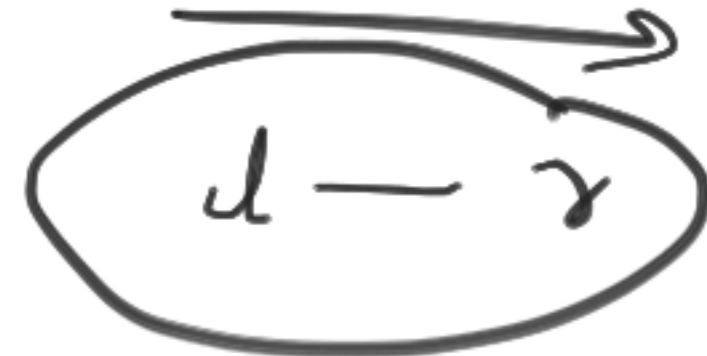
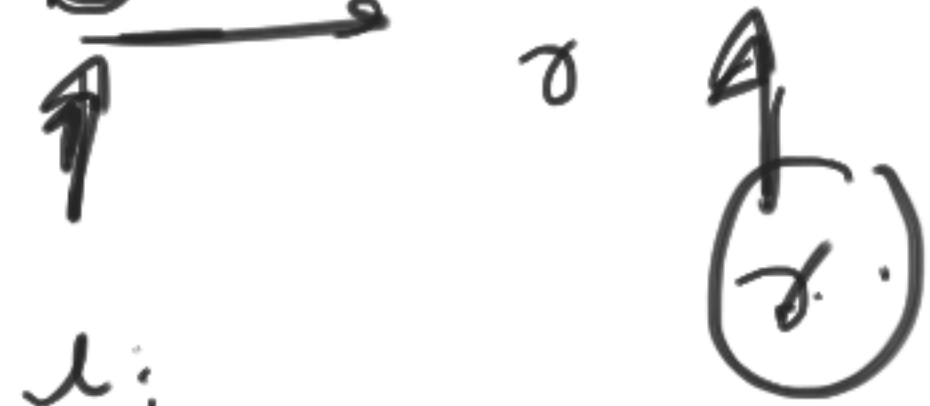
{ if ($A[l] == 0$)

$zc--$

$l++$

return

$x-l$



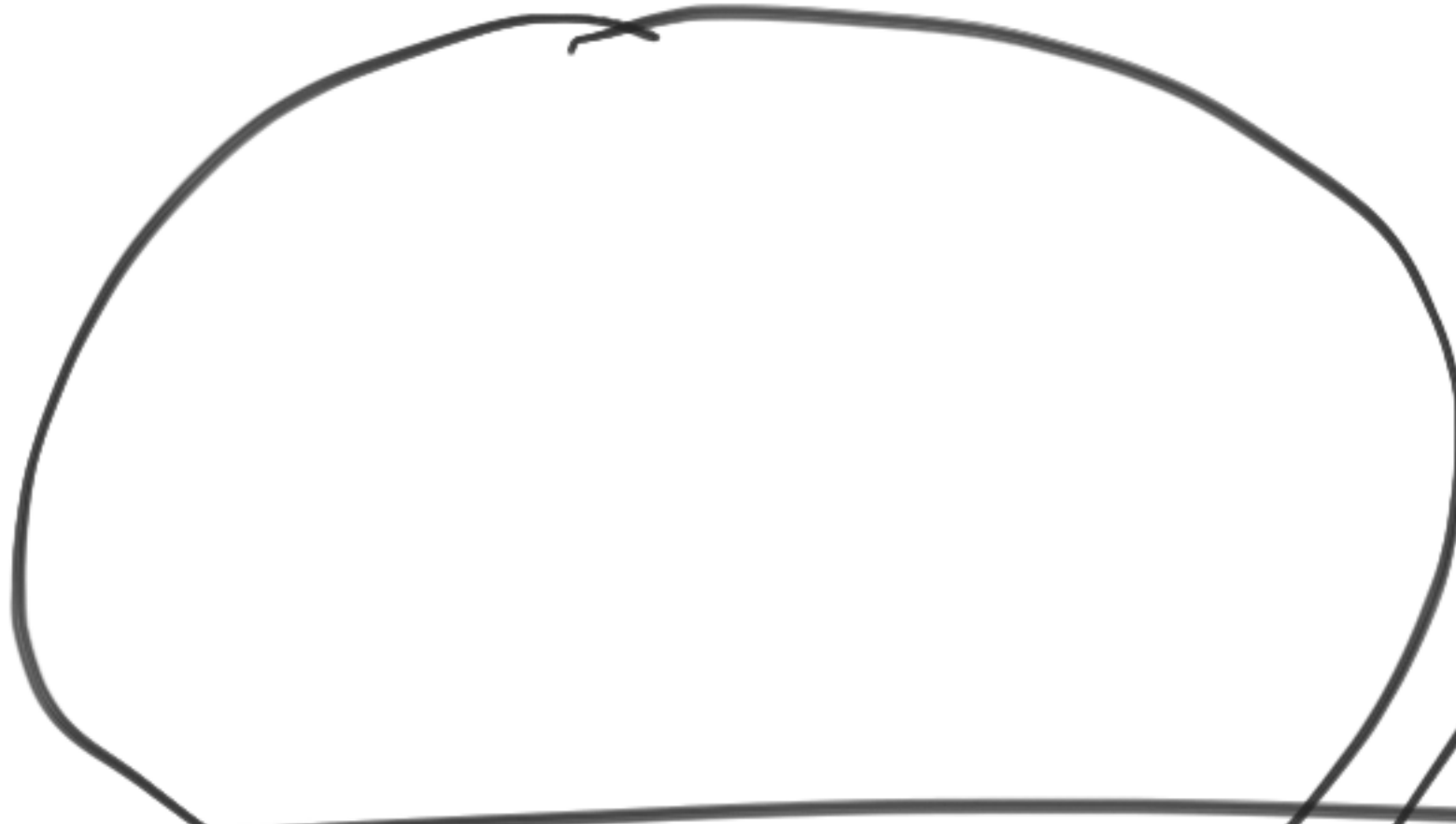
min size subarray sum

target



$$\text{sum}(i, j) \geq \text{target}$$

$$\min(j - i)$$



Design

Dynamic

Design browser
library

Hash Table

+

Linear DS

+

Questions
on Linear

Classroom

→ Array



