last index to left of i which is used

first index to right of i viz used

	0	1	2	3	4	5	6
	1	0	0	0	1	0	1
left →	0	0	0	0	4	4	6
right	0	4	4	4	4	6	6
	X	min(1,3) = 1	min(1,2) = 1	↓	X	↓	X
		i	a	l		l	

if (arr[i] == 0) left[i] = left[i-1]

ans = a

↳ arr[i] ↔ 0 → then only alien can sit on it

We should select a seat which can maximize the min dist

ans = max(ans, min(i - left[i], right[i] - i));

O(n)
O(n)

for every index we first find closest person to right or left.

Can we optimize our space ??

0 1 2 3 4 5 6

[1, 0, 0, 0, 1, 0, 1]

i

left → [0 0 0 0 4 4 6]

right [0 4 4 4 4 6 6]

prev = ~~1~~ ~~0~~ 4 (2 index)

next = ~~1~~ ~~0~~ 4

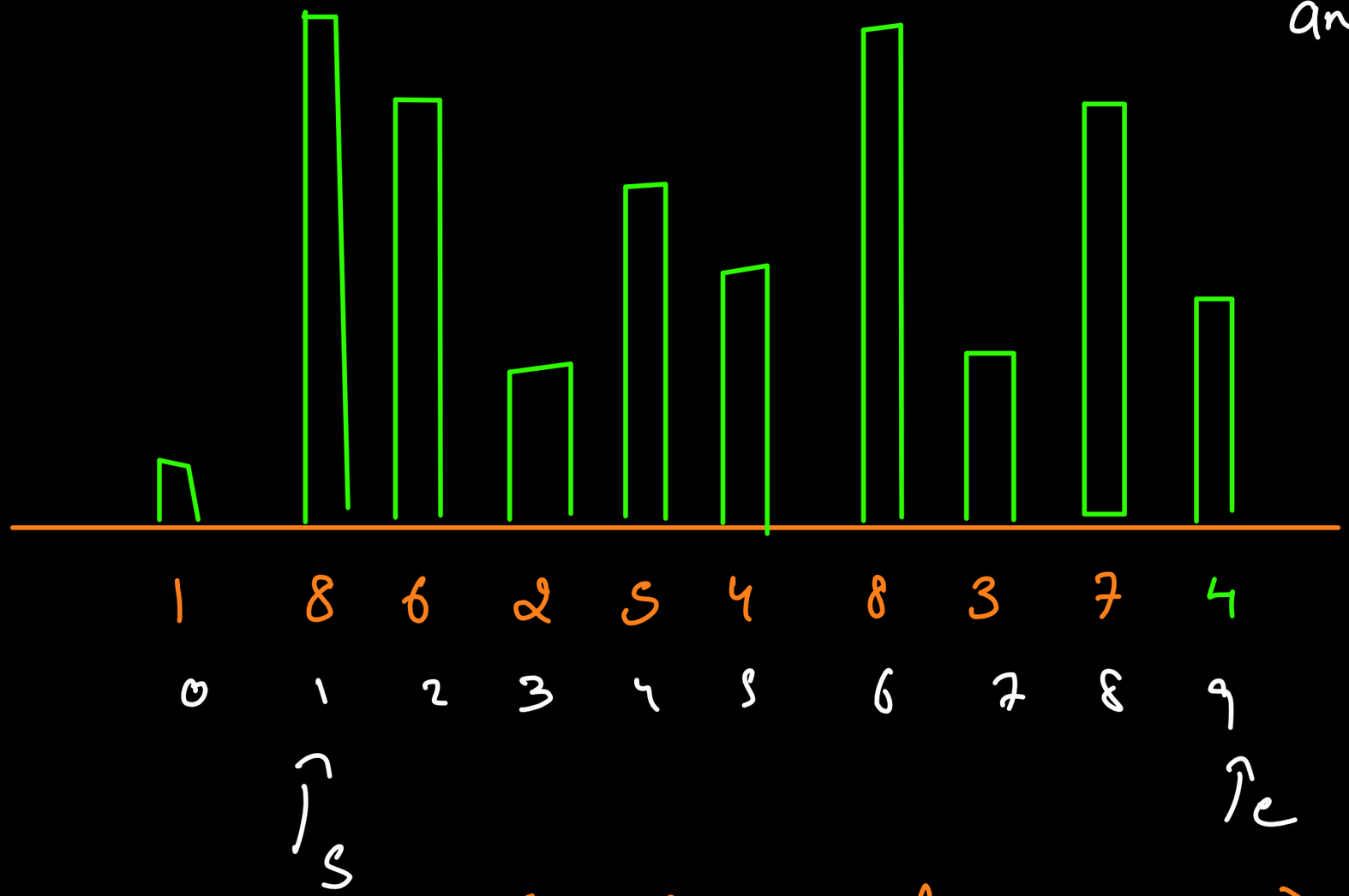
ans = max (ans, min (i-prev, next-i)) ;

1 1 0 0 0 1 1 0 1 1 0

i > next

↳ O(1)

O(n)



ans => ~~1~~ ~~38~~ 49

$(e-s) \times \min(a[s], a[e])$

O(n)

O(1)

```
while (s < e) {
    width = e - s
    ans = max(ans, width * min(a[s], a[e]))
    if(a[s] <= a[e])
        s++
    else
        e--
}
```