Maximum consecutive III

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→ you can change/flip at most k* zero.

[1, 1, 1, 0, 0, 0, 1, 1, 1, 1, 0] ⇒

intution: ⇒ We can keep a window and a counter that will keep track of no of zeroes occurred during expansion of window. We will also update the max size.

If zero > k then we will shrink the window from left.

l

[1, 1, 1, 0, 0, 0, 1, 1, 1, 1, 0] k = 2

r

r = 0	r = 1	r = 2	r = 3	r = 4
l = 0	l = 0	l = 0	l = 0	l = 0
nums[r] = 1	nums[r] = 1	nums[r] = 1	nums[r] = 0 = zero++	nums[r] = 0 zero++
zero > k² ✗	zero > k² ✗	zero > k ✗	zero > k ✗	zero > k² ✗
max = max, r − l + 1 = 1	max = max, r − l + 1 = 2	max = max, r − l + 1 = 3	max = max, r − l + 1 = 4	max = max, r − l + 1 = 5
r++	r++			

↓

r = 5
l = 0
nums[r] = 0

while ⇐
- zero > k 3 > 2 ✓
- nums[l] = 1 l++ = 1
- nums[l] = 1 l++ = 2
- nums[l] = 1 l++ = 3
- nums[l] = 0 zero−−, l++ = 4

zero > k ✗

max = Math.max(max, r − l + 1) = 5 (5 − 4 = 1 + 2)

r = 6	r = 7	r = 8 ✓
l = 4	l = 4	l = 4
nums[r] = 1	nums[r] = 1	nums[r] = 1
zero > k	zero > k	zero > k
max = (max, r − l + 1) = 5	max = (max, r − l + 1) = 5	max = (max, r − l + 1) = 5

↓

r = 9
l = 4
nums[r] = 0 zero++ = 3
zero > k ✓

while ⇐
- nums[l] = 0 ⇒ zero−− = 2
- l++ = 5

math.max = 5 ✓

⇒ **Final ans = 5**