

## Array-2

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Maximum subarray with sliding window on given

$[4, -1, 2, 10, -2, 3, -1, 5, -3]$   $k=4$

① Initial  $\Rightarrow n=9$

Window Sum = 0

$(n \times k)$  ✓

Sum of

first window

$$WS = 0 + 4 + (-1) + 2 + 10 = 15$$

$$MS = WS = 15$$

$i=4$

$$WS = 15 - 4 = 11$$

$$WS = 11 + (-2) = 9$$

$$MS = m(15, 9) = 15$$

$i=5$

$$WS = 9 - (-1) = 10$$

$$WS = 10 + 3 = 13$$

$$MS = m(15, 13) = 15$$

$i=6$

$$WS = 13 - 2 = 11$$

$$WS = 11 + (-1) = 10$$

$$MS = m(15, 10) = 15$$

$i=7$

$$WS = 10 - (10) = 0$$

$$WS = 0 + 5 = 5$$

$$MS = m(15, 5) = 15$$

$i=8$

$$WS = 5 - (-2) = +7$$

$$WS = +7 + (-3) = 4$$

$$MS = m(15, 4) = 15$$

$i=9$

$\rightarrow$  size

Return  $MS \rightarrow 15$