Plan

Day - Morning

Day - Evening $\boxed{6:30 - 10:30}$

1. Sliding window max
2. Digit Multiplier
3. first -ve   In k-size window
4. Car fleet
5. ~~k-concatenation~~

1. → K- concatenation
2. → max sum of smallest and second smallest in subarray.
3. → Interval list intersection
4. → Insert interval
5. → Min Domino Rotation for Equal Rows

K=3

arr →

9	7	2	4	6	8	2	1	5
index | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

i=3

next greater index on Right →

9*	5	3	4	5	9*	8	8	9*
index | 0 | 1 | 2 | 3 | 4 | 6 | 6 | 7 | 8 |

9 7 6 8 8 8 5
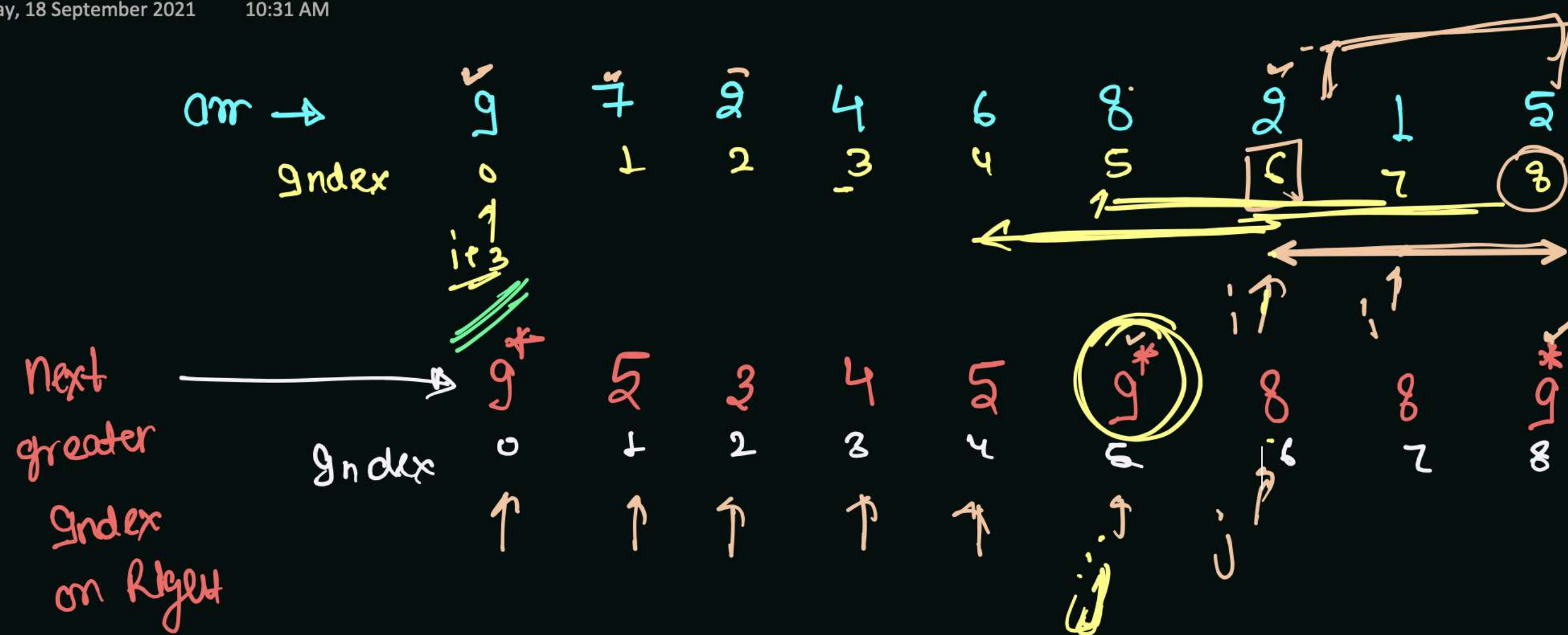
Next greater on right — using Stack

Steps:-

① find next greater index on right.

② Move with two pointer, i & j

i → beginning of window.

j → Try to find max in current window with help of next greater on right

③ k → help to figure out window size.

arr →   11   5   13   4   3   1   4   9   0

| 2 | 2 | 9 | 7 | 6 | 6 | 7 | 9 | 9 |

8 - 0
7 - 9
6 -
4 - 3   6 - 4
3 - 4
2 - 13
1 - 5
0 - 11

$N = \underline{100}$

time complexity - $O(\log N)$

$d_1 * d_2 * d_3 \cdots = \boxed{N}$, $\Rightarrow$ $d_1, d_2, d_3 \cdots$ are factor of N

S — minimum

$$\frac{100}{2} = \frac{50}{2} = \frac{25}{5} = \frac{5}{5} = 1$$

Ex $\rightarrow$ 46

num = 46

factor = 2 * 23

$g \xrightarrow{\quad} \boxed{2}$

$4 \rightarrow \boxed{23}$

num = 23

$2 * 2 * 5 = 5 = \frac{100}{22\,5J}$ minX $\rightarrow$ 4 × 5 × 5

$\llcorner$ min

To min. digit — find factor from 9 to 2

9 to 2

$$\frac{100}{5} = \frac{20}{2} = \frac{4}{4} = 1$$

Decreasing order

5 54 min

$\llcorner$ Min

max

$\overline{\boxed{4\,5\,5}}$

First Negative Integer in K Size window

$5k3$

$\{12, \underset{=}{-1}, \underset{=}{-7}, \underset{=}{8}, -15, \overset{5}{\textcircled{30}}, \overset{6}{16}, \overset{7}{28}\}$

$K=3$

$N=8$

$N-K$

$8 \quad 3 \quad = 5$

$\textcircled{1}$ mark

$K=3$

-ve number $= 8$

Size 8

$8 \quad 3 \quad = 5$

$4 \; / \; 2 \quad 1$

$8 - (k-1)$

$8 - \overset{31}{3}$

-ve index $< i+k$

$\rightarrow$ otherwise $\rightarrow$ 0

$-1 \quad -1 \quad -7 \quad -15 \quad -15 \quad -0 \quad \rightarrow$

Steps:

① travel from end to first and
max -ve numbers index in initial k window

② travel and update -ve index onsd
set in res