Let's begin at 9:02 PM.

L44
Queue & Deque : Classical Problems

RECAP

Today - Again practice (Good Problems)

1. Numbers only using digits 2, 3, or 5

$$\left(1 \le N \le 10^5\right)$$

$N=1 \implies 2$

$N=2 \implies 3$

$N=3 \implies 5$

$N=4 \implies 22$

$N=5 \implies 23$

$N=6 \implies 25$

$N=7 \implies 32$

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'22) '23' (25

[2, 3, 5]

[2, 3, 5, 22, 23, 25)

[3, 5, 22, 23, 25, 32, 33, 35]

[5, 22, 23, 25, 32, 33, 35, 52, 53, 55)

$$[\ \cancel{22},\ 23,\ 25,\ 32,\ 33,\ 35,\ 52,\ 53,\ 55,\ 222,\ 223,\ 225\ ]$$

$$[\ \cancel{23},\ 25,\ 32,\ 33,\ 35,\ 52,\ 53,\ 55,\ 222,\ 223,\ 225,\ 232,\ 233,\ 235\ ]$$

2. IPL Match Day

Eg. N = 9, K = 3

1 2 3 1 4 5 2 3 6

1 2 3 -> 3
2 3 1 -> 3
3 1 4 -> 4
1 4 5 -> 5
4 5 2 -> 5
5 2 3 -> 5
2 3 6 -> 6

$1 \le K \le N \le 10^5$

Output $\Rightarrow$ [3, 3, 4, 5, 5, 5, 6]

$$a_i \quad \leq\text{--} \quad a_j$$

$$k$$

$i < j$

$a_i \leq a_j$

i & j come together in some window of size k.

eg. N = 9, K = 3
     1 2 3 1 4 5 2 3 4

K=3   Q = [8 (4)]

[1, 2, 3, 1, 4, 5, 2, 3, 4]
                          ↑
                        i=8

ans = [3, 3, 4, 5, 5, 5, 4]

3. Max Value (a good one)

Thank You!

Reminder: Going to the gym & observing the trainer work out can help you know the right technique, but you'll muscle up only if you lift some weights yourself.

So, PRACTICE, PRACTICE, PRACTICE!