

L26

Arrays - Practice 6

*Stay tuned for the System Design Course
Announcement.*

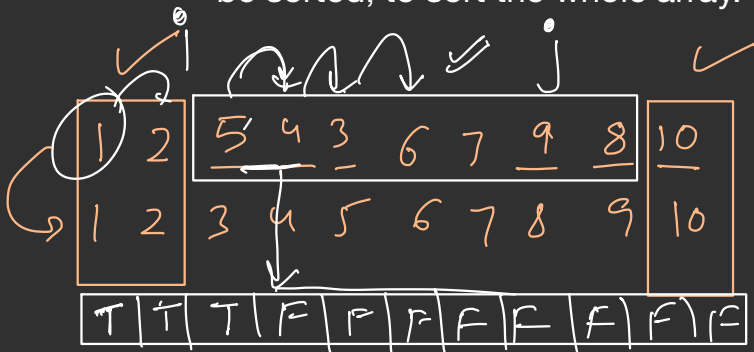
Join Discord - <https://bit.ly/ly-discord>

RECAP

1 4 6 8 3 7 10
1 2 3 4 5
5 4 3 2 1

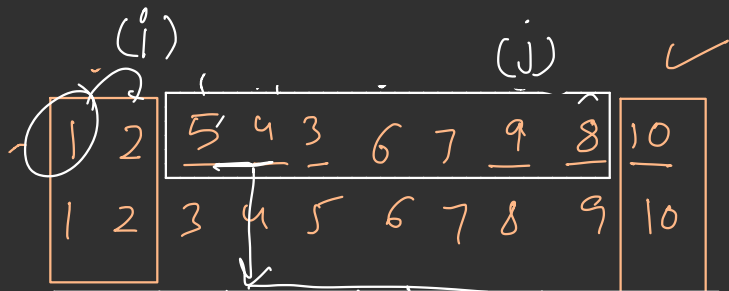
1 2 8 7 4 3 10 11
 ✓

Length of Shortest Subarray that can be sorted, to sort the whole array.



max - 9

min - 2

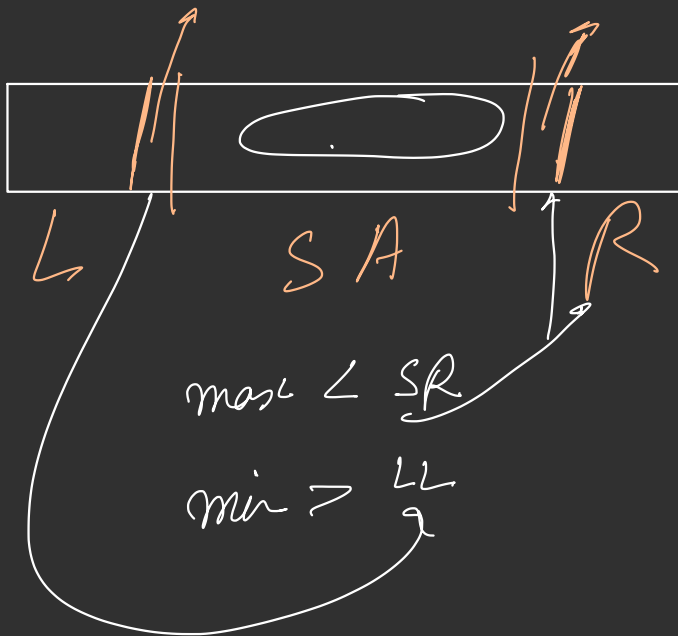


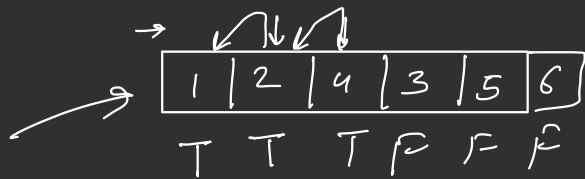
| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| T | T | T | F | F | F | F | F | F | F | F |
|---|---|---|---|---|---|---|---|---|---|---|

→ pre-sorted

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| F | F | F | F | F | F | F | F | F | T | T |
|---|---|---|---|---|---|---|---|---|---|---|

→ self-sorted

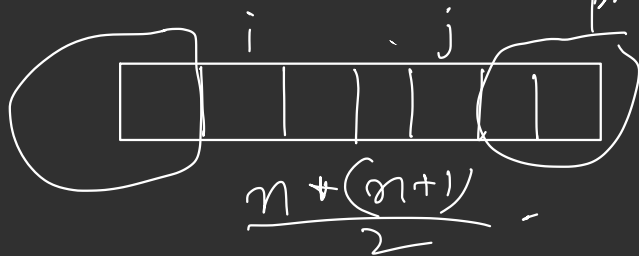




(i) $\rightarrow ar[i]$ $ar[i-1]$

(ii) $\rightarrow pre_sorted[i-1]$

$\frac{pre_sorted[j+1]}{pre_sorted[i-1]}$



n
 $n-1$
 $n-2$
 $n-3$

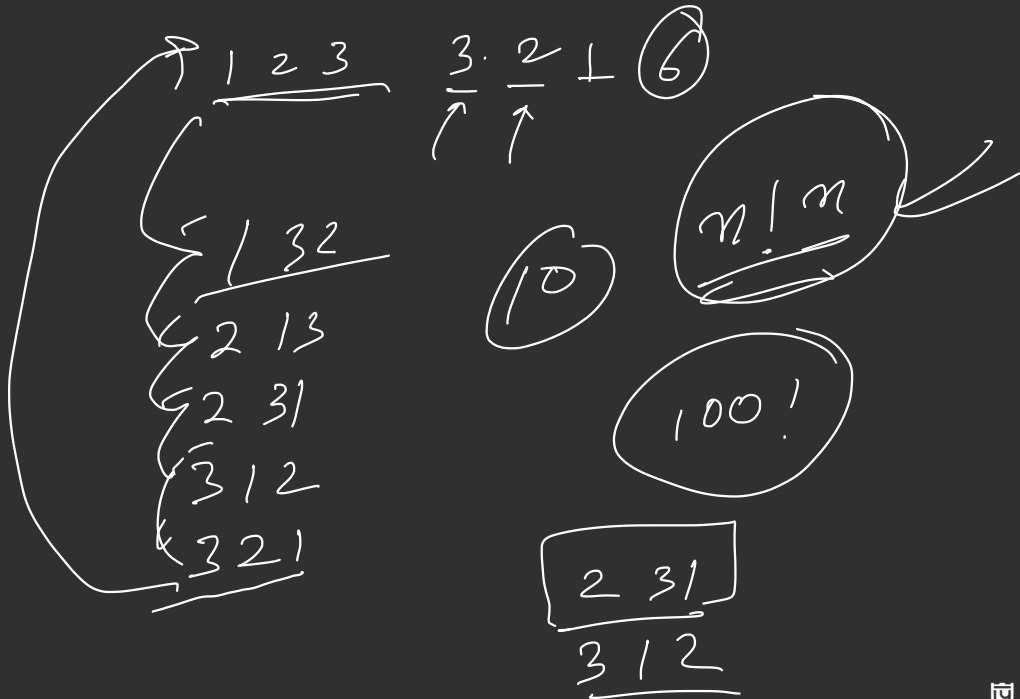
Fraz
 Ajay
 Pulkit
 Sher
 Ajaz
 Shafi

Next Permutation

Ajay
 Ajaz
 Fraz
 Pulkit
 Shafi
 Sher

1 4 2 3
 1 2 3 4
 4 3 2 1
 4 2 1 3

1 2 3 4
 1 4 2 3
 4 2 1 3
 4 3 2 1



1 2 3 4 5

1 2 3 5 4

1 2 4 3 5

1 2 4 5 3

1 2 5 3 4

1 2 5 4 3

1 3 2 4 5

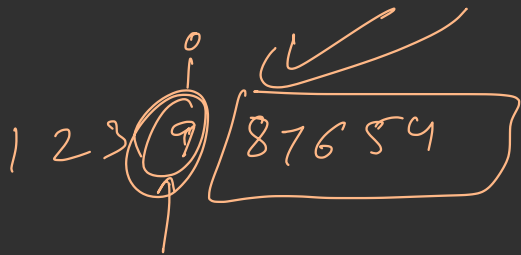
5 4 3 2 1

2 3 4 5

1 2 5 4 3
1 3 2 4 5

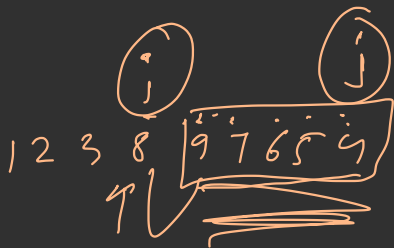
2, 4, 5

1 2 3 ⁰ 9 | 8 7 6 5 4



1 2 3 9 4 5 6 7 8

1 2 3 8 ⁱ | ^j 9 7 6 5 4



Yet Another Broken Keyboard (CodeForces)

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!