

81 268 Missing Number.

Numbers from 0 to N \Rightarrow total there will be $N+1$ nos.

Example - $N=4$, arr = [1, 0, 2, 1]

[0, 1, 2, 3, 4] \rightarrow You can see that it is sort

\hookrightarrow Here element == index

0 1 2 3
4 0 2 1

\hookrightarrow can not put it anywhere $i++$;

4 0 2 1
 \swarrow swap

0 4 2 1 $\Rightarrow i++$

0 1 2 1 \Rightarrow correct index

0 4 2 1
 \swarrow swap

0 1 2 4 ~~ing~~ ignore

start searching from here \hookrightarrow loop over

0 = 0

1 = 1

2 = 2

3 = 4 \neq Hence 3 is missing

0 1 2 3 4

Index 4 does not exist?

Ignore it

Case-2 When N is not there in the array

Example - $N=4$

arr = [1, 0, 3, 2]

\Rightarrow [0 1 2 3
0 1 2 3]

\therefore Ans = $N=4$