

→ Recursion ←

→ simple code (basic logic)

→ merge sort

→ difficult Q. (interview)

→ calling a $f(x)$ from the $f(x)$ body

① recursive $f(x)$

② base condition

$$\rightarrow n! = n * (n-1) * (n-2) * (n-3) * \dots * 1$$

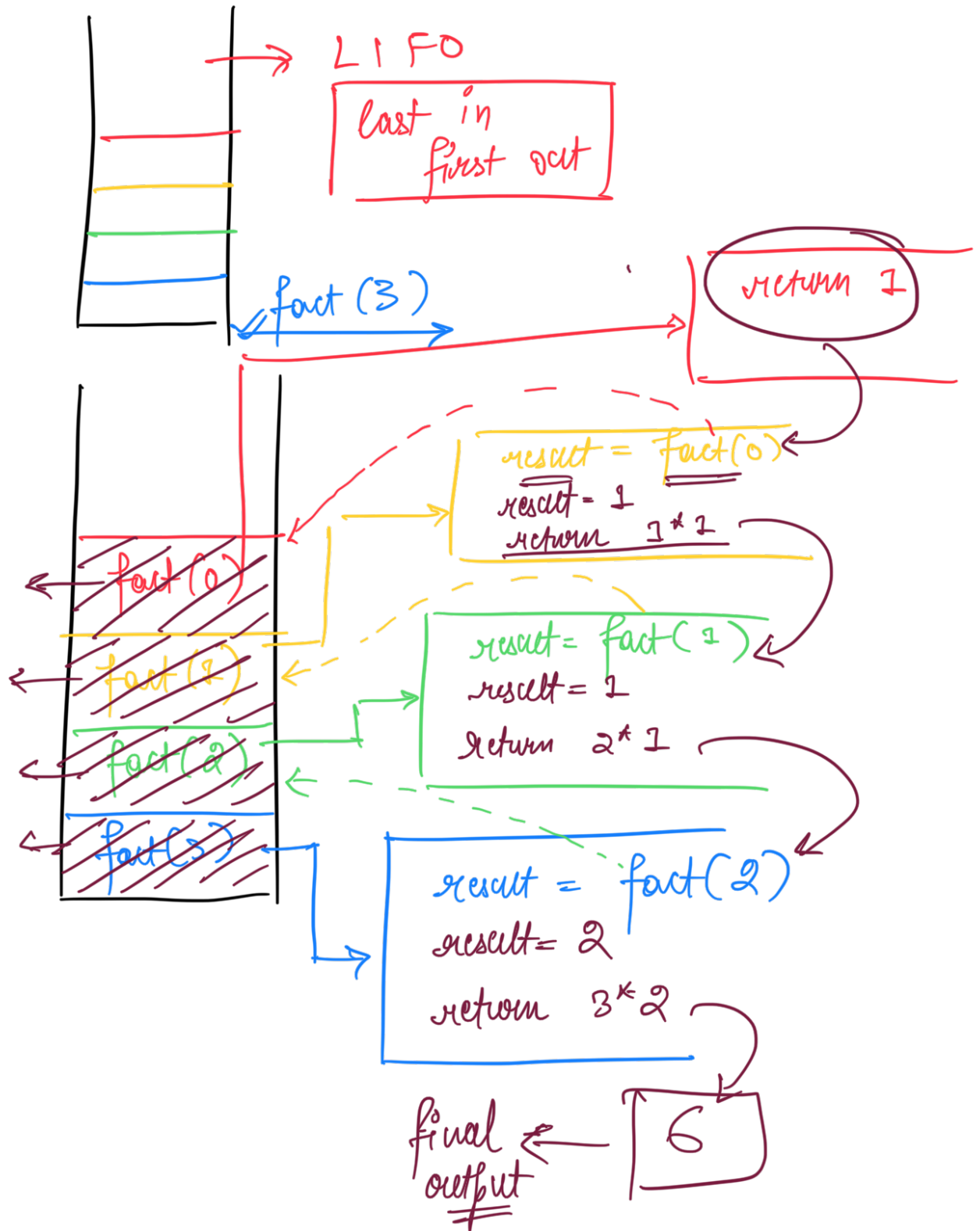
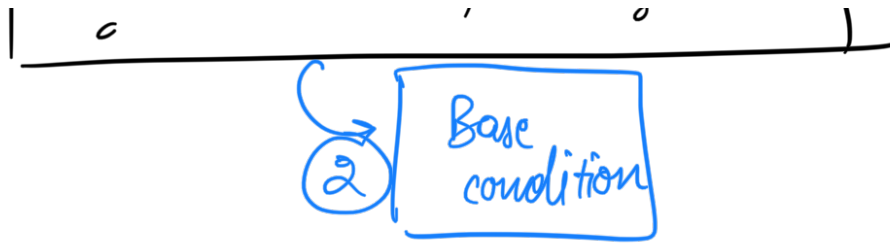
$$\rightarrow n! = n(n-1)!$$

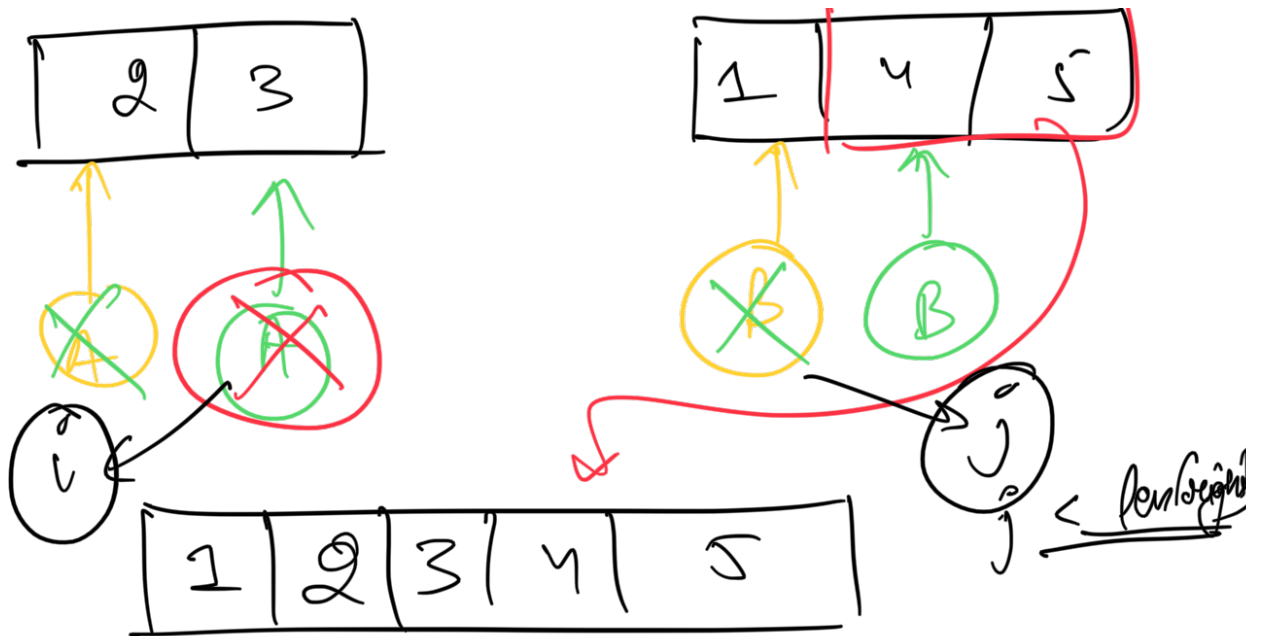
function

recursive formula

calling $f(x)$ from within $f(x)$ body.

$$1! = 1 \quad , \quad 0! = 1$$

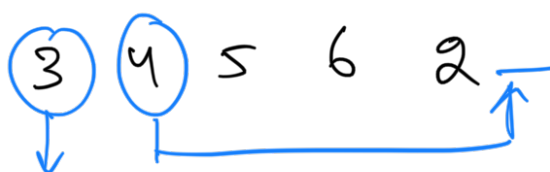
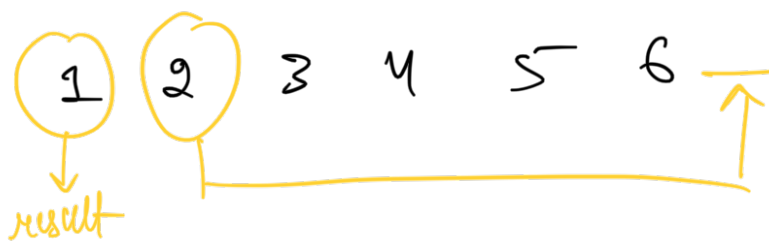




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You have a list of numbered cards.

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0 → 1



0 → 1 3



0 → 1 3 5



0 → 1 3 5 2



4

0 → 1 3 5 2 6 4

0 → 1 3 5 2 6 4

→ 1 2 3 4 5 6

elements at odd positions.

→ 2 4 6

same

→

4

~~l(0)~~

~~l(1)~~

l(2)



$l(q)$
$m(r)$