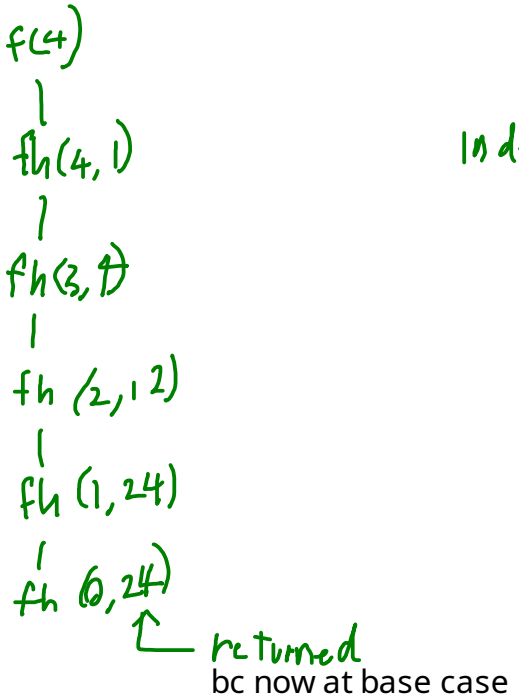
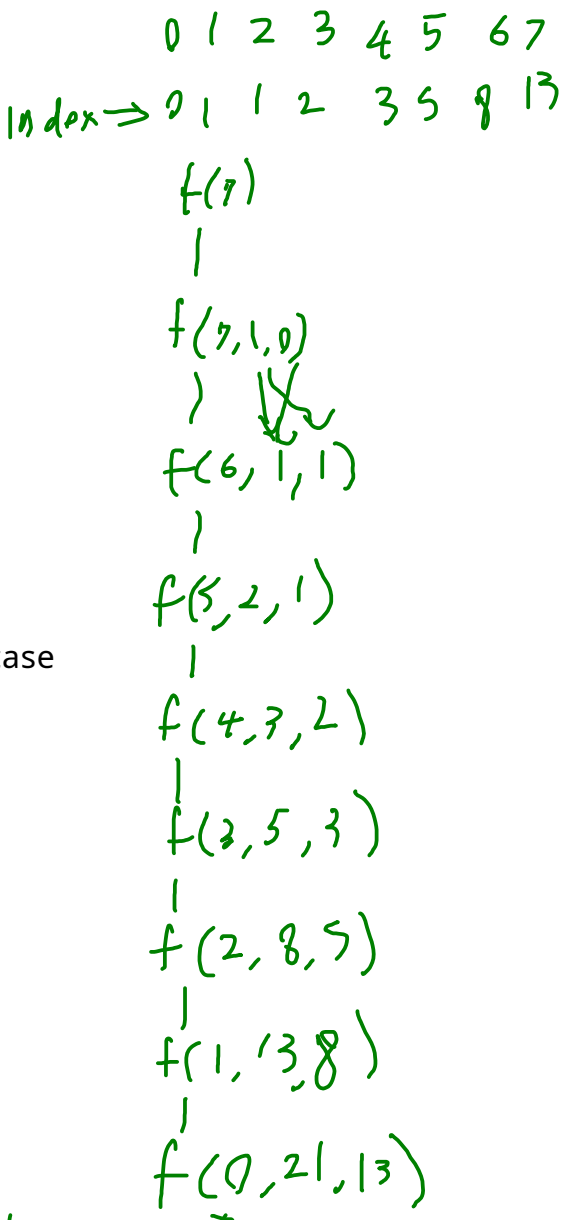


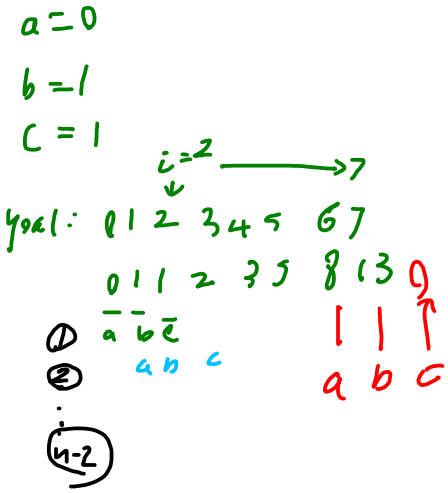
factorial



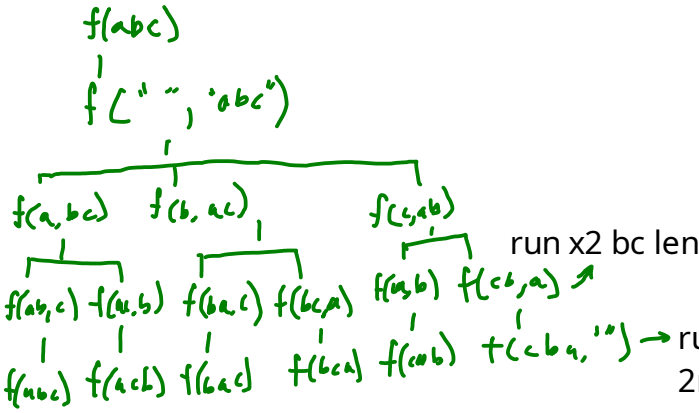
tail recursive fib: a lot less calls!

$a_{n+2} = a_{n+1} + a_n$

$\begin{cases} a_0 = 0 \\ a_1 = 1 \end{cases}$



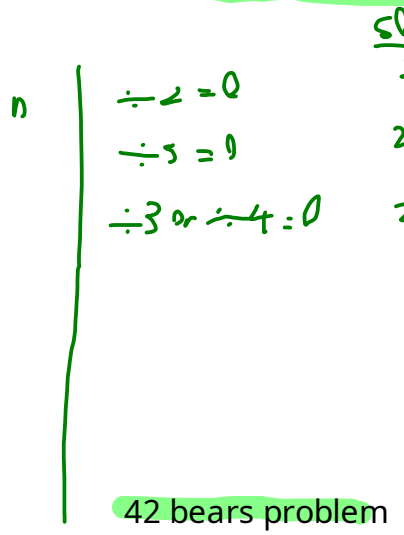
generate fibonnaci using iteration



run x2 bc length of 2nd string is 2

→ run one more time and hit the base case, cause 2nd string is empty

find all permutations of a string



$\frac{500}{2} \rightarrow 250$ if even num, can kill 1/2 of bears

$250 - 42 \rightarrow 208$ if divisible by 5, can kil 42 bears

$208 \rightarrow 0 \cdot 8 = 0$ if divisible by 3 or 4, take last 2 digits, multiply, and and kill that many bears

goal: try to get to 42 bears (some nums have sol, some no sol)

42 bears problem