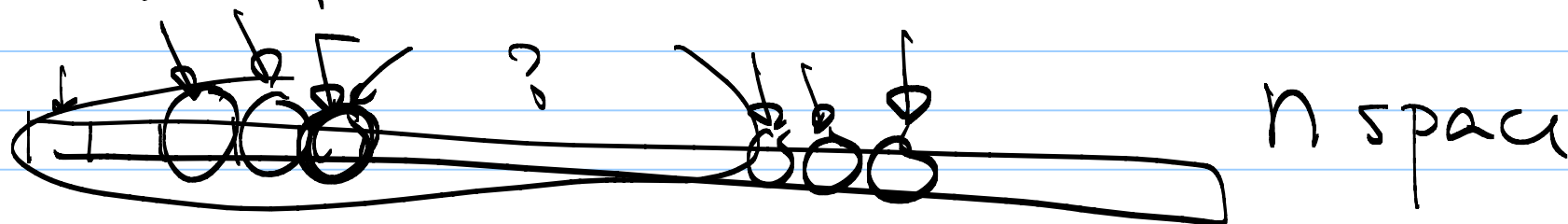


$$F(0) = 0, F(1)$$

$$F(n) = F(n-1) + F(n-2), \text{ for } n \geq 2.$$

Given n , compute $F(n)$.



A : size is $n+1$

$$A[0] = 0, A[1] = 1$$

for ($i=2; i \leq n; i++$)

$$A[i] = A[i-1] + A[i-2];$$

return $A[n]$;

} n steps.

* only keep 2 previous values. \Rightarrow constant space
Time still linear in n .

$O(\log n)$ time

