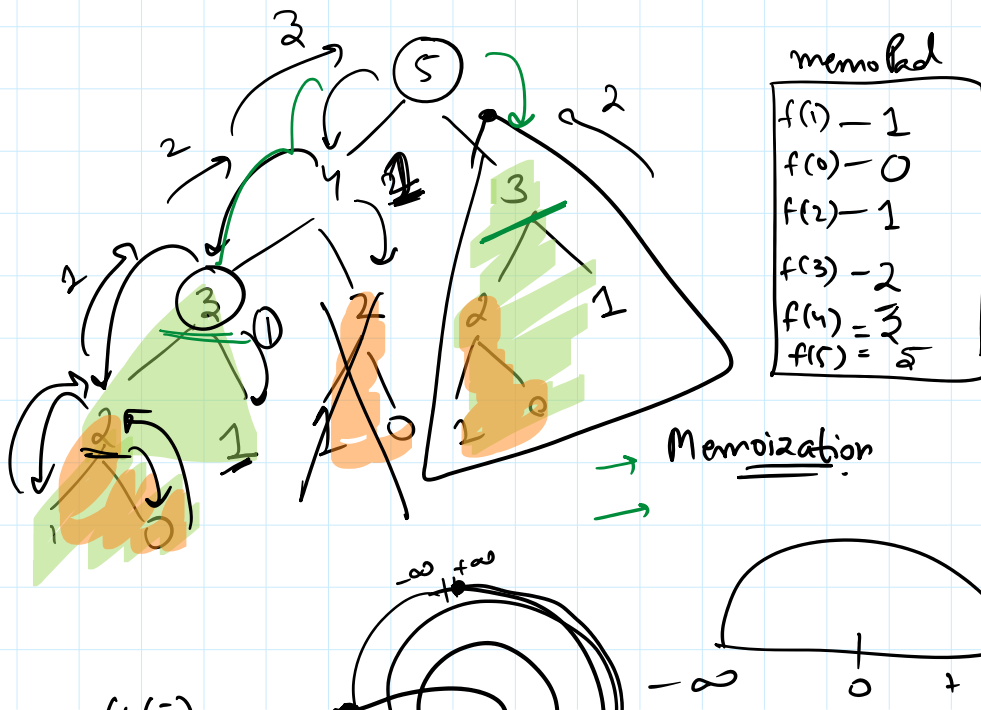
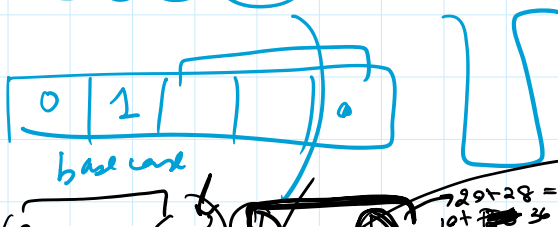
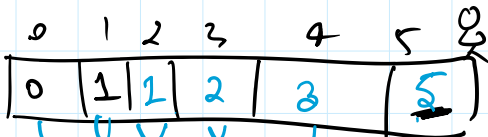
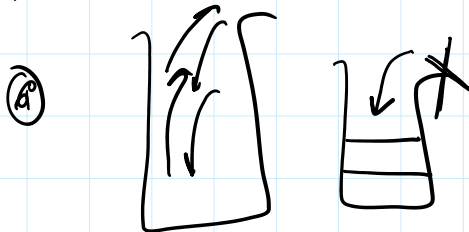
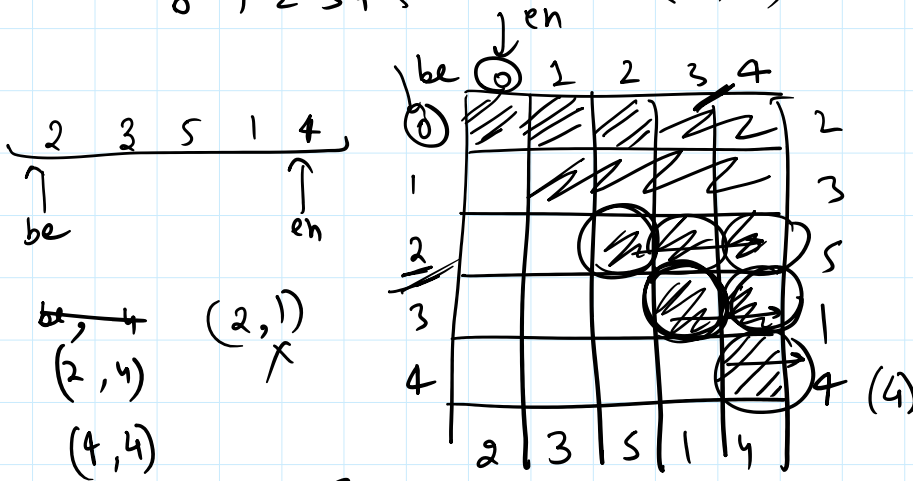
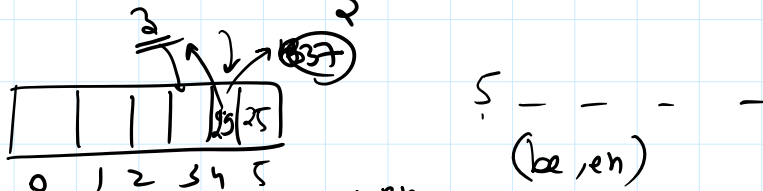
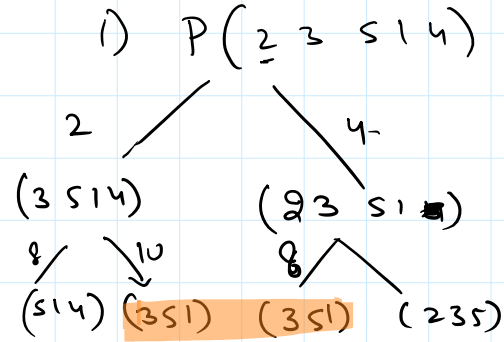
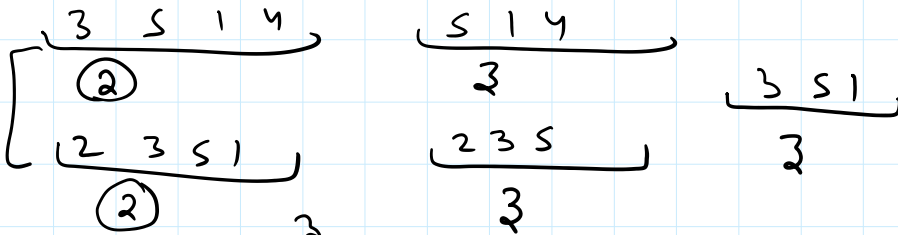
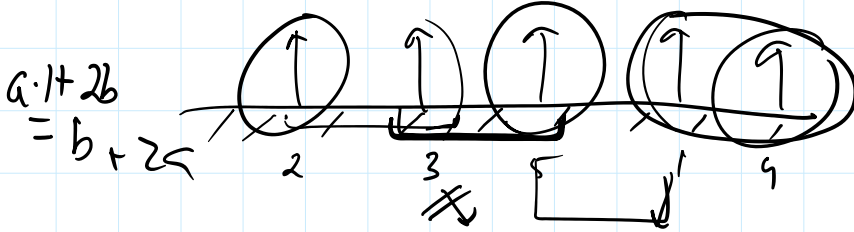
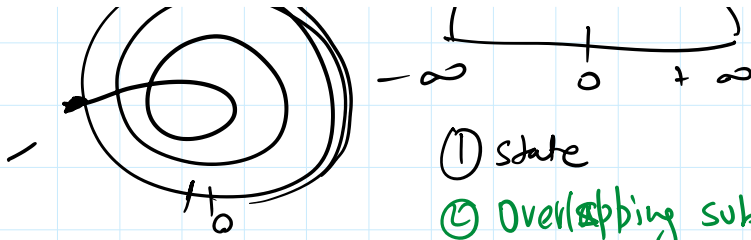


Fib

$n=0 || n=1 \text{ ret } n$
 $fib(n) = fib(n-1) + (n-2)$



fib(5)



$4 + 23 = 27$
 $c + 20 = 28$

$4 + 23 = 27$

$8 + 20 = 28$

$$4 + 23 = 27$$

$$8 + 20 = 28$$

max profit
no. of bottles
(be ch)

$$2 \times 6 = 12$$

$$4 \times 3 = 12$$

$$15 + 8 = 23$$

$$12 + 8 = 20$$

$$3 + 10 = 13$$

$$5 + 8 = 13$$

$$13 + 3 = 16$$

$$11 + 9 = 20$$

$$16 + 20 = 36$$

$$12 + 24 = 36$$

base case

2	8	23	28	48
2	2	13	20	36
3		5	11	24
5			4	9
1				
4				

$20 + 28 = 48$
 $10 + 24 = 34$
 $12 + 11 = 23$
 $1 + 10 = 11$
 $5 + 2 = 7$
 $15 + 5 = 20$
 $12 + 11 = 23$
 $4 + 2 = 6$
 $4 - 3 = 1$
 $4 - 4 = 0$

prices

1	2	3	5	...
6	10	15	17	

curr

$$8 - 1 * 1 + 1 + \dots + 1 = 6 \times 8 = 48$$

$$8 - 2 + 2 + \dots + 1 + 1 = 3 + 2 + 1 = 6$$

	0	1	2	3	4
0	2	6			1
1	3		15		
2	5			25	
3	1				24
4	4				20

$4 + 20 = 24$
 $16 + 5 = 21$
 $price[i] \cdot yr + max[yr-1]$
 $price[i] \cdot yr + mem[i][i-1]$
 $4^{th} \text{ year } (5 - (4 - 3)) = 4$

(next yr from beg)
(next yr from end)

$$cell = price[en] + (end \text{ to } 4 \text{ to } 1)$$

$$dp[i][j] = \max(price[j] \cdot yr + dp[i][j-1], price[i] \cdot yr + dp[i+1][j])$$

our cell