		0	1	2	3	4	5
prices		1	2	1	2	1	7
profits	0	0	0	0	0	0	0
	1	0	1	1	1	1	6
k+1 * len(prices)	2	0	1	1	2	2	7
	3	0	1	1	2	2	8

profits[i][j] = max(profits[i][j-1] , prices[j] + max(-prices[x] + profits[i-1][x])) where 0 <= x < j

i=2

| i | j | | | | | | |

		0	1	2	3	4	5	6	7
prices		2	5	7	1	4	3	1	3
profits	0	0	0	0	0	0	0	0	0
	1	0	3	5	5	5	5	5	5
k+1 * len(prices)	2	0	3	5	5	8	8	8	8
	3	0	3	5	5	8	8	8	

https://github.com/donnemartin/interactive-coding-challenges/blob/master/recursion_dynamic/max_profit_k/n

```
profits[i][j]    =  max(    profits[i][j-1]  ,   prices[j]   +   max(-prices[x] + profits[i-1][x])) where 0 <= x < j
```

| i | j | | | | | | | | |

prices	3	2	6	5	0	3
profits	0	0	0	0	0	0
	0	0	4	4	4	4
k+1 * len(prices)-1	0	0	4	4	4	7

https://jovian.ai/justcallmerob/max-profit-with-k-transactions

```
profits[i][j]     =  max(     profits[i][j-1]  ,   prices[j]   +   max(-prices[x] + profits[i-1][x])) where 0 <= x < j
                                                                                                  i=2
profits[2][5]     =  max(     profits[2][5-1]      prices[5]       x=0    -3      profits[1][0]    0    =     -3
                                                                   x=1    -2      profits[1][1]    0    =     -2
                                                                   x=2    -6      profits[1][2]    4    =     -2
                                                                   x=3    -5      profits[1][3]    4    =     -1
                                                                   x=4     0      profits[1][4]    4    =      4

                          4                ,      3          +      4
```

左の値か計算した値か

計算した値は、その日の株価にmax()を足したもの
max()は、tx数が1少ない際のprofitsを基にしたもの
まず買いの日の株価をマイナスにする
その上でその日までのprofitを足し込む

i	j																										
0	0	0	売買回数0回																								
0	1	0	売買回数0回																								
0	2	0	売買回数0回																								
0	3	0	売買回数0回																								
0	4	0	売買回数0回																								
0	5	0	売買回数0回																								
1	0	0	初日のみ																								
1	1	0	3で買2で売	profits[1][0] = 0								2	+	x=0	-price[0] = -3	profits[0][0] = 0					=	-3	MAX				
1	2	4	2で買って	profits[1][1]=0								6	+	x=0	-price[0] = -3	profits[0][0] = 0					=	-3					
			6で売る											x=1	-price[1] = -2	profits[0][1] = 0					=	-2	MAX				
1	3	4	2買6売	profits[1][2]=4								5	+	x=0	-price[0] = -3	profits[0][0] = 0					=	-3					
														x=1	-price[1] = -2	profits[0][1] = 0					=	-2	MAX				
														x=2	-price[2] = -6	profits[0][2] = 0					=	-6					
1	4	4	2買6売	profits[1][3]=4								0	+	x=0	-price[0] = -3	profits[0][0] = 0					=	-3					
														x=1	-price[1] = -2	profits[0][1] = 0					=	-2	MAX				
														x=2	-price[2] = -6	profits[0][2] = 0					=	-6					
														x=3	-price[3] = -5	profits[0][3] = 0					=	-5					
1	5	4	2買6売	profits[1][4]=4								3	+	x=0	-price[0] = -3	profits[0][0] = 0					=	-3					
														x=1	-price[1] = -2	profits[0][1] = 0					=	-2					
														x=2	-price[2] = -6	profits[0][2] = 0					=	-6					
														x=3	-price[3] = -5	profits[0][3] = 0					=	-5					
														x=3	-price[4] = 0	profits[0][4] = 0					=	0	MAX				
2	0	0	初日のみ																								
2	1	0		profits[2][0]=0								2	+	x=0	-price[0] =-3	profits[1][0] = 0					=	-3	MAX				
2	2	4		profits[2][1]=0								6	+	x=0	-price[0] =-3	profits[1][0] = 0					=	-3					
														x=1	-price[1] =-2	profits[1][1] = 0					=	-2	MAX				
2	3	4		profits[2][2]=4								5	+	x=0	-price[0] =-3	profits[1][0] = 0					=	-3					
														x=1	-price[1] =-2	profits[1][1] = 0					=	-2	MAX				
														x=2	-price[2] =-6	profits[1][2] = 4					=	-2					
2	4	4		profits[2][3]=4								0	+	x=0	-price[0] =-3	profits[1][0] = 0					=	-3					
														x=1	-price[1] =-2	profits[1][1] = 0					=	-2					
														x=2	-price[2] =-6	profits[1][2] = 4					=	-2					
														x=3	-price[3] =-5	profits[1][3] = 4					=	-1	MAX				
2	5	7	3買6売(4)	profits[2][4]=4								3		x=0	-price[0] =-3	profits[1][0] = 0					=	-3					
			0買3売(3)											x=1	-price[1] =-2	profits[1][1] = 0					=	-2					
														x=2	-price[2] =-6	profits[1][2] = 4					=	-2					
														x=3	-price[3] =-5	profits[1][3] = 4					=	-1					
														x=4	-price[4] =0	profits[1][4] = 4					=	4	MAX				

i	j