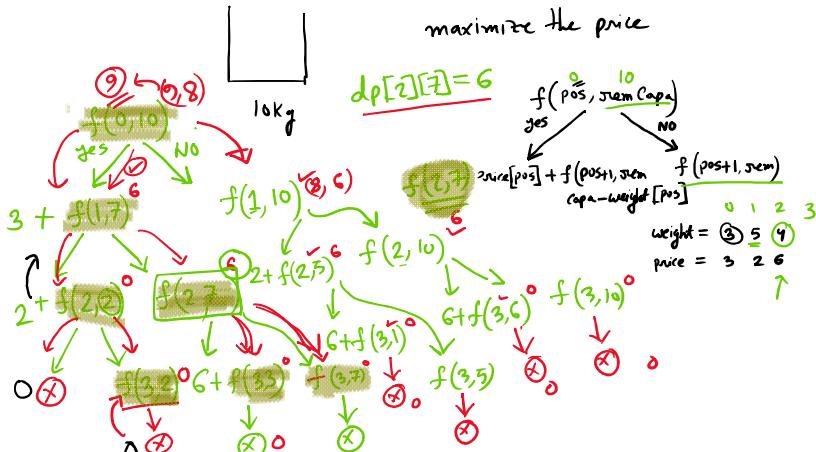


01 Knapsack

Bag Capacity = 10 Kg



Variant 1: You have N taka and you want to make change with K coins Assuming that number of K coins are infinite. Is it possible to change N taka with the coins?

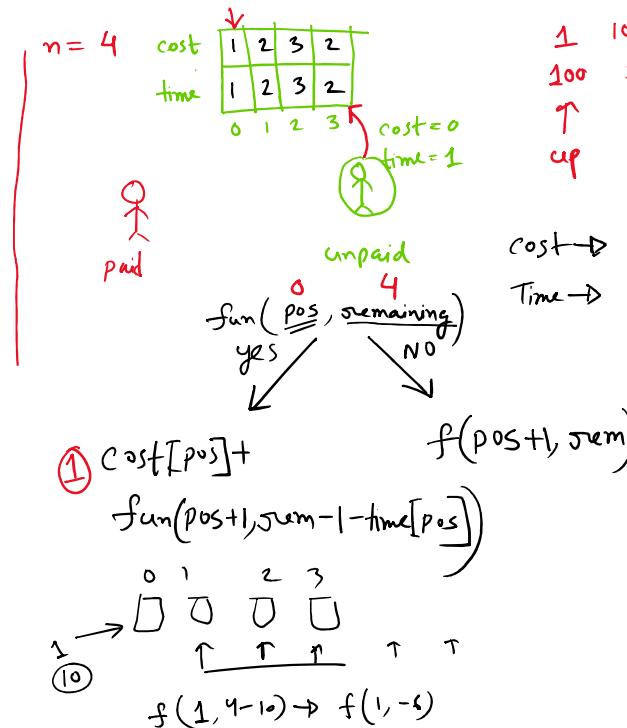
Variant 2: You have N taka and you want to make change with K coins. Assuming that number of coins are infinite. How many ways it is possible to change N taka with the coins?

Variant 3: You have N taka and you want to make change with K coins. Now, you can take a coin only once. Is it possible to change N taka with the coins?

Variant 4: You have N taka and you want to make change with K coins. Now, you can take a coin only once. How many ways it possible to change N taka with the coins?

Variant 5: You have N taka and you want to make change with K coins. Assuming that number of K coins are infinite. But, any two ways are same if the frequency of the coins are equal. How many ways it is possible to change N taka with the coins?

Variant 6: You have N takas and you want to make change with K coins with value $[V_1, V_2, V_3, \dots, V_k]$ with frequency of each coin $[F_1, F_2, F_3, \dots, F_k]$. Assuming that number of K coins are infinite. Is it possible to change N takas with the coins?



100

3
P

$f(0, \omega)$
 \downarrow
 $f(1, \omega)$
 \downarrow

⋮

$f(10, \omega)$