D19 - Knapsack W = 5 Wi = 1 2 4 5
Vi = 5 4 8 6

Base Case

```
if idx == 0:
    if Wi[0] ≤ W:
        return Vi[0]
    else:
        return 0
```

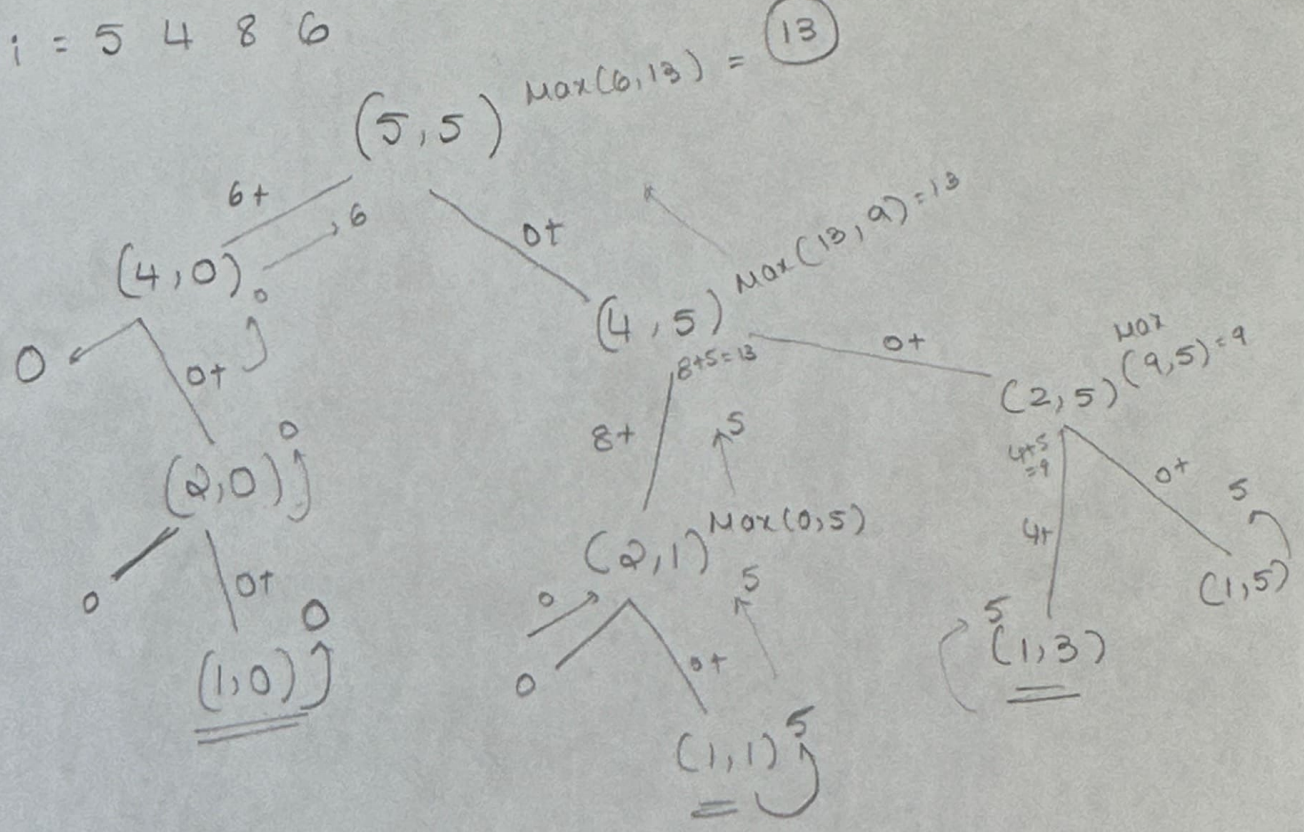
If I have a bag capacity more than Wi, only then We take

take/no take

```
if Wi[idx] ≤ W:
    take = Vi[idx] + recur(idx-1, W-Wi[idx])

no_take = 0 + recur(idx-1, W)
```

W = 5 Wi = 1 2 4 5
Vi = 5 4 8 6



W = 5 Wi = 1 2 4 5

Vi = 5 4 8 6 → W

	0	1	2	3	4	5
1	0	5	5	5	5	5
2	0	5	5	9	9	9
4	0	5	5	9	9	13
5	0	5	5	9	9	(13) → Max

w[idx] ≤ W:

take = Vi[idx] + dp[idx-1][W-W[idx]]

no_take = 0 + dp[idx-1][W]

dp[idx][W] = Max (tak, No_take)