

0 0 0 0 0 0 1 2 -1 1  
 1 3 2 5

$dp[n][2]$   
 for  $i = 1; i \leq n$

5 7 8 5  
 5 16 24 30  
 9 14 25 33

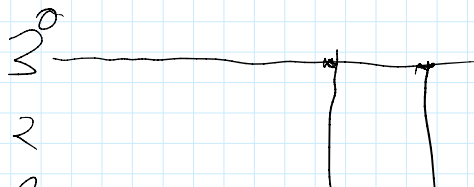
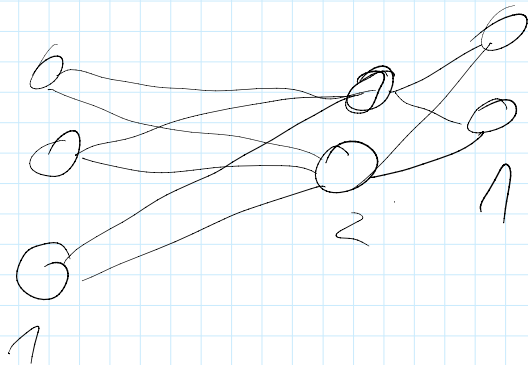
$dp[i][0] = \max(dp[i-1][0], dp[i-1][1]) + in[i];$   
 $dp[i][1] = dp[i-1][0] + g_i$

$\max(dp[n][0], dp[n][1])$

| n \ W | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------|---|---|---|---|---|---|---|---|---|----|
| 1     | 0 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4  |
| 2     | 0 | 5 | 5 | 9 | 9 | 9 | 9 | 9 | 9 | 9  |
| 3     | 0 | 5 | 5 | 9 | 9 | 9 | 9 | 9 | 9 | 13 |

$dp[2][W]$

1, 2



2  
1

1 2

3

4

5

0

2 2

0

~~2~~ ~~1~~ ~~1~~ 6  
1 2 3 3  
~~1~~ 2 ~~1~~ 3 ~~1~~