



$dp[k]$ = no. of ways to get the sum k

$$dp[k] = \sum_{i=1}^n dp[k - c_i]$$

$$dp[0] = 1$$

final subproblem : $dp(x)$

time complexity:

states \times avg transition time

$$\underline{O(x)} \times O(n) = O(n \cdot x)$$

Space complexity:

$$\# \text{ states} = \underline{\underline{O(x)}}$$