

CS532 Homework 5 – Sanity Check

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Question 8

```
def knapsack1(W,V,w):
    cost = [[0 for i in range(w+1)] for j in V]
    for i in range(len(V)):
        for j in range(w+1):
            if i == 0:
                if W[i] <= j:
                    cost[i][j] = V[i]
                else:
                    cost[i][j] = 0
            elif W[i] <= j:
                cost[i][j] = max(cost[i-1][j],cost[i-1][j-W[i]]+V[i])
            else:
                cost[i][j] = cost[i-1][j]
    return cost[i][j]
```