**Task. Knapsack**

Given are n items with weights $w_i$, and costs $v_i$, i=1,...,n. We want to put some of these items in a knapsack of capacity of maximum weight W to get the maximum total cost. Write program knapsack to find this maximum cost.

**Input**: The values of n and w, followed by n pairs: $w_i$, $v_i$. All numbers are positive integers, separated by spaces.

**Output**: One integer equal to found maximum total cost.

**Constraints**: $0 < n < 100$, $0 < W < 100$, $0 < v_i < 10$, $0 < w_i < 10$.

**Example. Input**:

3 5
1 4
5 3
2 2

**Output**

6