



(/en/),
v1.1.0

CSD Testing System

(/en/)

Knapsack problem 3.0

Cost: 12 | Solved: 51

Memory limit: 256 MBs

Time limit: 1 s

Input: input.txt

Output: output.txt

Task:

A robber sneaked into a bank and found n gold bars with weights of w_1, w_2, \dots, w_n kgs and values of p_1, p_2, \dots, p_n . The robber can't get away with all bars, for his knapsack can only hold the weight not greater than W kgs.

Find the optimal set of bars that will allow the robber to get away with maximal *value*.

Input:

The first line contains a natural n ($1 \leq n \leq 500$) – the quantity of gold bars and an integer W – the maximal sum the robber can get away with.

The second line contains bars' weights (w_1, w_2, \dots, w_n).

The third line contains bars' values (p_1, p_2, \dots, p_n).

Output:

The indices of the gold bars the robber should grab.

Example:

Input	Output
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2 10 100 80 10 9	1
5 100 1000 550 550 550 550 80 50 50 50 50	2 3