Question 7: Bang for your Buck

Description

Every year your family participates in a food drive that holds a competition where participants fill a shopping cart with as many items as possible in 10 mins. At the end of the competition the total value of each cart is used to determine the winner and this year the prize is a 10 day pass to your favorite mini-golf spot. Since each person in the competition is required to by in with a $100 donation to the food drive you've deviced a plan to make sure your family picks you to run and that you'll win.

To practice you've generated a small program that mimics the information processing that you'll need to perform during the competition. Your program tracks a list of items with their size, represented by area, and value on a scale of 1 to 100, 1 being the lowest and 100 being the highest. After everything is listed you test whether you can determine the maximum value given a maximum area of space the items can take up.

Input Description

The number of items will be provided on the first line of input, the second line of input will be a space separated list of integer values for the items worth, the third line of input will be a space separated list of integer values representing the items size, and the last line will be the maximum size capacity allowed.

Output Description

Your output should be the maximum value achievable within the maximum area.

Input Example

3

60 100 120

10 20 30

50

Output example

220