Stocking Up

Giancarlo procrastinated packing for his camping trip and now he is nearly out of time.

He is at the store now and needs to buy some items to take on the trip. The problem is that he only has 1 bag with limited capacity and a limited amount of cash to buy items at the store.

Given the limited money that he has, Giancarlo wants to figure out what items he should buy which both fit in his bag and fit in his budget. Your job is to write a program to help him do that.

Input:

The first line contains the number of items in the store, n.

The second line contains the capacity of Giancarlo's bag, c.

The third line contains Giancarlo's total budget for items, b.

Following these 3 lines are n lines with 3 integers each separated by a space.

The first integer on the line is the size of the item, s.

The second integer on the line is the cost of the item, c.

The third integer on the line is the value of the item to Giancarlo, v.

Output:

The maximum value Giancarlo can get given the size of this bag and budget.

Constraints of actual problem:

n = 1000

c = 1000

b = 1000

1 <= s <= 20

1 <= c <= 10

1 <= v <= 100

Sample Input:

10

25

15

2 2 9

4 3 8

3 4 3

5 3 6

3 1 5

8 4 8

9 1 10

1 4 1

8 2 2

6 2 9

Sample Output:

42