Discount

Description

Weekends is coming, Dr. K decide to go out for shopping. Wow, he is so luck today that the shopping mall is on sale. Here are the conditions for discount:

1. Total consumption before discount is at least **100** dollars
2. At most half of the items that one buys can be discounted.
3. The customer decides which items for discount.

Now given the items that Dr. K decides to buy, can you help him to decide the items for discount if possible?

Input

Input contains multiple test cases and is terminated by end of file. The first line of each test case contains one integer **N (1≤N≤100)**, the total number of items that Dr. K decides to buy. Each of the following **N** lines contains two integers $\mathbf{a_i}$ and $\mathbf{b_i}$ $\mathbf{(a_i > b_i)}$, where $\mathbf{a_i}$ is the price of the $\mathbf{i_{th}}$ item and $\mathbf{b_i}$ is the corresponding price after discount. The price of each item is no higher than **100** dollars.

Output

For each test case, the output contains one line with a single integer, the total money Dr. K has to pay in the best possible way.

Sample Input	Sample Output
1 99 70 3 100 90 55 35 75 70	99 210

Hints

For the second case, Dr. K would choose the second item for discount, which makes the total consumption 100+35+75=210