JS8 // Zhehai's Amazon Account

Zhehai has a large problem. Whenever he gets his paycheck, he immediately spends more than he has and goes into debt making him have to make more. With each item Zhehai buys, he attaches a value to it. A value that represents how useful it is to him. Help Zhehai become responsible by telling him the maximum value of what he can buy and how much it will cost him. Zhehai does not value duplicate goods so each item should only be taken once. Make sure that this cost is not above his budget so that he will not go into debt.

Input Specification:
The first line consists of two integers B(0<=B<=2000) and N(0<=N<=200), where B represents Zhehai's budget and N represents the number of items Zhehai can purchase. The next N lines contains two integers, v and c. representing the value and cost of each item respectively. Zhehai's paycheck, B, will never exceed CAD$2000. He can never can never become rich. The number of items, N, will also be less than 200. He is not intelligent enough to look at more.

Output Specification:
The output consists of two integers, V and C, representing the maximum value of items Zhehai can purchase followed by the total cost of those items. If there are multiple costs for the maximum value of goods, output the lowest cost. You cannot take a fraction of an item.

Sample Input:
10 3
7 3
8 8
4 6

Sample Output:
11 9

Sample Input:
5 10
2 3
2 5
1 4
2 6
3 4
4 5
7 8
6 9
5 8
4 5

Sample Output:
4 5