Ming orders sweets

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Topic : Dynamic Programming

Description :
Ming has a sweet tooth. One day, he goes to dessert shop and wants to buy sweets. In this shop, there are types of sweets which have limited inventory. For sweets type i, Ming knows that there are n_i in stock and each one costs p_i dollars. Also, sweets type i is associated with a satisfaction score s_i, which means that if Ming eats one of that sweets, his satisfaction score will increase s_i.

Ming loved sweets very much. Therefore, he planned to buy them all. Unfortunately, he discovered that he didn't have enough money. As a consequence, he needed to come up with a strategy in order to maximize his satisfaction. Please help Ming find out the maximum satisfaction score given **M** dollars.

Input and Output Format
The first line contains two integers **N** and **M**, indicating there are **N** kind of sweets and Ming has **M** dollars. Next, there are **N** lines and each line have 3 integers n_i, p_i, and s_i, indicating the shop has n_i amount of sweets i in stock, and each one costs p_i and will give Ming s_i satisfaction.
Please output one integer in a line, which indicating the maximum satisfaction.

example:
N M
n_0 p_0 s_0
n_1 p_1 s_1
…
n_i p_i s_i

1 <= N <= 350
0 <= M <=150000
1 <= n_i, p_i, s_i <= 150000

Sample Input and output

Input :
4 15
1 5 150
2 2 70
10 3 20
6 7 160

Output :
380

Input :
9 135678
1 58845 100243
1 55201 14822
1 121505 65600
1 81187 98260
1 137468 65305
1 55858 144735
1 27066 93292
1 133267 66010
1 66325 46740

Output :
244978

Time and memory limit
Time: 3s
Memory: 100MB