Problem A - Virtual Gardening

Rin is currently stuck in a virtual simulation with a tablet that can create anything she draws. She wants your help to create a beautiful field filled with flowers she can play around in!

Rin knows how to draw several different types of flowers, each of which has its own beauty level. The beauty of a whole field is the sum of all the beauty levels of the flowers planted in that field.

The tablet Rin is using has a short battery life, so she can only draw a total of n $(1 \leq n \leq 50000)$ flowers before it runs out of battery. Furthermore, Rin gets bored if she draws the same thing too many times, so she has a limit on how many of each type of flower she will draw.

Help Rin determine that maximum beauty of a field she can create if she keeps on drawing flowers until her tablet runs out of battery, or when she refuses to draw any more flowers out of boredom!

Input

The first line of the input consist of a single integer t $(1 \leq t \leq 100)$, the number of test cases.

The first line of each test case will contain two integers, p and n $(1 \leq p \leq 1000; 1 \leq n \leq 50000)$, the number of types of flowers Rin is able to draw and the number of flowers she can draw before the tablet runs out of batteries, respectively.

The next p lines each contain two integers, b_i and n_i $(1 \leq n_i, b_i \leq 1000)$, with the i th such line signifying the beauty of each flower of type i and the number of flowers Rin's willing to draw of that type respectively. The types of flowers are sorted in order of decreasing beauty.

Output

Output a single integer for each test case, the maximum beauty of a field Rin can create.

Sample Input

```
2
3 5
5 1
4 2
3 8
1 1000
5 10
```

Sample Output

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19
50
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