Description

Feri is trying to find some place to put a new set of chocolate pieces in he received for Christmas. The chocolate pieces must be stored together in a **single** container.

Feri has n jars, each jar contain some chocolate pieces already and has a capacity for how many chocolates can be stored in the jar in total.

Calculate the number of jars that can accommodate Feri's new chocolates. That is, how many jars have room for Feri's new chocolates without removing any chocolates already in that jar.

Input

The first line of input contains two integers m and n, in that order. Here, m is the number of pieces of chocolate that Feri has and n is the number of jars that Feri has.

Then n lines follow, each describing a jar. A jar is given by two integers: the first being the number of chocolates already in that jar and the second being the maximum number of chocolates that can fit in the jar. All numbers in the input will be between 0 and 100.

Output

Print the number of jars that can hold all of Feri's m chocolate pieces.

Sample Input 1

```
2 3
1 1
2 2
3 3
```

Sample Output 1

```
0
```

Explanation: Feri has 2 chocolate pieces and there are 3 jars. All the jars are full, so none of them can accommodate Feri's chocolates.

Sample Input 2

```
5 3
1 10
0 10
6 10
```

Sample Output 2

```
2
```

Explanation: Feri has 5 chocolate pieces to tuck away and there are 3 jars. The first two have enough capacity left to store 5 pieces but the last jar cannot hold all 5 chocolate pieces.