Description

Feri is trying to find some place to put a new set of m chocolate pieces in that he got for Christmas. The chocolate pieces must be stored together. He has n jars and each jar can store a different number of chocolate pieces, but jars already have some chocolate pieces in them. Calculate the number of jars that Feri can store all his chocolate pieces in.

Input

The input will consist of $n + 1$ lines. The first line contains the value of m and n (in this order). The next n lines will have two numbers each: Each line represents a jar. The first number is telling the number of chocolate pieces that are already stored in that jar, while the second number represents the capacity of the jar.

All numbers will be between 0 and 100.

Output

Print the number of jars that Feri can put his m chocolate pieces into.

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, hence the output is zero.

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, hence the output is 2.