Group Booking

by leandro_shp

A group of friends are planning a city break. Each person in the group has a personal budget that they can spend on accommodations. One person, elected as the organizer, is in charge of booking the minimum number of rooms for the group. The organizer has to take their friends' budgets into account and the number of available rooms with their capacity and price per person. The organizer has already established that there are enough rooms to accommodate the group. The next step is to figure out the minimum number of rooms to book.

Can you help the organizer with this task?

Input Format

Input begins with the number of friends in the group (G) followed by the number of rooms available (R). The second line contains space-separated friends' budgets (B). Input concludes with the description of the rooms, one per line. For each room, there is the price per person (P) followed by the maximum capacity (C).

Constraints

All numbers are integers in the following ranges:

- $1 <= G <= 100000$
- $1 <= R <= 1000000$
- $1 <= B <= 10000$
- $1 <= P <= 100000$
- $1 <= C <= 100$

Output Format

The output is a number M which represents the minimum number of rooms that can accommodate the group.

Sample Input

```
3 4
60 75 50
40 1
70 2
40 1
40 1
```

Sample Output

```
3
```

Explanation

Based on the rooms available, the only way to accommodate the group that fits their budget is to put all of them in a different room, which costs 40 euro per person. So the output is 3.

Submissions: 198

Max Score: 200

Difficulty: Difficult

More

Current Buffer (saved locally, editable) Java 8

```
1  import java.io.*;
2  import java.util.*;
3
4  public class Solution {
5
6      public static void main(String[] args) {
7          /* Enter your code here. Read input from STDIN. Print output to STDOUT.
   Your class should be named Solution. */
8      }
9  }
```

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code