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D. Fireworks Show

Time Limit: 1.0 Seconds Memory Limit: 65536K Multiple test files

It's Independence Day, and Farmer John has taken the cows to the fireworks show. Bessie wonders how much of the show the cows will be able to see since they might not be able to stay for the entire display.

The show features C ($1 \leq C \leq 100$) fireworks cannons conveniently numbered 1..C. Cannon i shoots fireworks every T_i ($1 \leq T_i \leq$ N) seconds (all times in this task are integer seconds). In a spectacular opening, all cannons first shoot at time 0. Fireworks are visible only during the second in which they are launched from the cannon. The cows will stay at the show from time 1 through time N ($1 \leq N \leq 2{,}000{,}000$).

Help Bessie figure out how many different times the cows will be able to see fireworks during the time period that they are at the show.

Input

* Line 1: Two space-separated integers: C and N.

* Lines 2..$C + 1$: Line i+1 contains the single integer T_i.

Output

* Line 1: A single integer that is the number of distinct seconds in the time interval from 1 through N that the cows will be able to see fireworks.

Sample Inpput

```
2 20
4
6
```

Sample Output

```
7
```

Input Details

The show features 2 cannons: one shooting fireworks every 4 seconds, the other shooting every 6 seconds. The cows will stay at the show from time 1 to time 20. Below is a chart showing the fireworks launches and the time the cows are present.

```
      CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
2                                   2                                   2 ...
1           1     2     1           1           1     2     1           1 ...
+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+ ...
0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 ...
```

Output Details

There will be fireworks at times 4, 6, 8, 12, 16, 18, and 20, for a total of 7 distinct times. (Note that time 12, where both cannons shoot fireworks simultaneously, is only counted once.) See the graph above.

Source: USACO 2007 March Competition

Problem ID in problemset: 2790

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