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## Cassette

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You have a cassette with  $t$  seconds of length, and  $n$  songs with lengths  $d_1, d_2, \dots, d_n$ . Your aim is to store the maximal number of whole songs in the cassette. You must consider that songs must be recorded with a second of separation between them.

### Input

The input consists of a series of cases separated with a line in white. Each case consists of two lines: The first one has  $t$  and  $n$ . The second one has  $n$  numbers:  $d_1, d_2, \dots, d_n$ . You can assume  $1 \leq t \leq 10^8$ ,  $n \geq 1$ , and that for each  $i$ ,  $1 \leq d_i \leq 10^6$ .

### Output

For each case of the input, your program must print the maximal number of whole songs that fit in the cassette, bearing that they must be separated by a second in mind.

- **TestA:** In some test cases  $n \leq 100$  will be fulfilled.

60 Points

- **TestB:** Other test cases will include cases with  $n \leq 10^5$ .

40 Points

### Sample input

```
11 5
2 2 2 2 2

10 5
2 2 2 2 2

100 1
101

1000 3
17 1 17
```

### Sample output

```
4
3
0
3
```

### Problem information

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