

Problem H

A Magician's Card Game

Time Limit: 2 Seconds

Problem Description

A magician has a deck of cards with numbers listed on each card. The rules of the game are simple: you tell the magician a number and they respond with the number of ways that any number of cards can be grouped to yield the number you specified. You can assume each card will be unique and strictly greater than zero.

For example, if the cards in the deck were:

2 3 5 6 8 10

And the number you said was 10, then there would be three possible groupings:

1 2 3 4 2 3 5 1 4 5

Input File Format

Input consists of a series of test cases. The first line of a test case will be a line consisting of two integers N and S representing the number cards in the deck (N) and the number you tell the magician (S). The following line contains N integers which each represent the values written on each of the cards. The program should terminate when $N = 0$.

Output Format

For each test case, print out the *number* of all possible combinations of cards that add to the specified number.

Sample Input

```
6 10
2 3 5 6 8 10
5 10
1 2 3 4 5
4 6
1 2 3 4
2 100
1 98
0 0
```

Output for the Sample Input

```
3
3
2
0
```