B - Coin Hole

Input: `coin.in`
Output: `standard output`

Being somewhat compulsive, I fill my pocket every morning with enough coins so I can make any amount up to a dollar. Don't ask me why, I just do. In this program, you are given a list of coin values representing a pocketful of coins, and must determine the least amount that can't be made and how many amounts between 0 and the total of the coins can't be made from the pocketful of coins.

Input

The input consists of zero or more lines, each describing a pocketful of coins. Each line contains zero or more positive integer coin values, separated by a space.

Output

For each line of the input, compute the least nonnegative integer amount that can't be made exactly using coin values from the input list. Note that it must be greater than zero (which can always be made using no coins) and not greater than the total of the coins plus one. Also compute the number of amounts between zero and the total of the coins that can't be made exactly using coin values from the input list. Format the output as shown in the output sample below.

Sample Input

```
1 1 1 5 10 25 25
25 1 10 1 5 1 10 1 25 25
35 23 13 11 5 2 1 1
```

Sample Output

```
the least amount that can't be made exactly is 4
the number of amounts between 0 and 68 that can't be made exactly is 21

the least amount that can't be made exactly is 105
the number of amounts between 0 and 104 that can't be made exactly is 0

the least amount that can't be made exactly is 10
the number of amounts between 0 and 91 that can't be made exactly is 2
```