Problem B

Diet Plan

You have a diet plan for the next N days (numbered from 1 to N). During day i, you need to drink exactly P_i mL of milk. Alternatively, you can consume a biscuit instead, as a replacement for milk on that day.

Currently, you only have M mL of milk and K biscuits. If there is not enough milk to drink on a day and you run out of biscuits, then your diet plan stops.

Determine the maximum number of days you can maintain your diet plan.

Input

The first line consists of three integers N M K ($1 \leq N \leq 100; 0 \leq M, K \leq 100$).

The next line consists of N integers P_i ($1 \leq P_i \leq 100$).

Output

Output a single integer representing the maximum number of days you can maintain your diet plan.

Sample Input #1

```
7 100 2
70 30 20 40 50 40 10
```

Sample Output #1

```
5
```

Explanation for the sample input/output #1

You can consume a biscuit on day 1 and 4 to maintain your diet plan for 5 days.

Sample Input #2

```
7 70 1
70 30 40 20 50 10 60
```

Sample Output #2

```
3
```

Explanation for the sample input/output #2

You can consume a biscuit on day 1 to maintain your diet plan for 3 days.

Sample Input #3

```
7 0 100
100 100 100 100 100 100 100
```

Sample Output #3

```
7
```

Sample Input #4

```
7 0 0
1 1 1 1 1 1 1
```

Sample Output #4

```
0
```