

Buckets

1 second, 32MB

A bucket can keep at most 1,000 units of water. You currently have 5 buckets, numbered from 1 to 5. You receive N jars of water. The i -th jar contains X_i units of water. You will pour the water from that jar *entirely* to the bucket with the smallest amount of water. If there are more than one buckets with the minimum amount of water, you will choose the one with the smallest number. If the bucket cannot hold all the water, you throw the left over water in the jar away.

After processing each jar, if the bucket is full (i.e., it has 1,000 units of water), you take the water to the water tank. How many units of water you finally put into the tank?

Input

The first line contains an integer N , the number of jars. ($1 \leq N \leq 1,000$) The next N lines provide the list of X_i 's. That is, line $1+i$, for $1 \leq i \leq N$, contains X_i . ($1 \leq X_i \leq 2,000$)

Output

The output contains one integer, the amount of water you put into the water tank.

Example

| <u>Input</u> | <u>Output</u> |
|---|---------------|
| 8 100 200 300 400 500 950 950 950 | 2000 |

Explanation for the example

| jar | Bucket1 | Bucket2 | Bucket3 | Bucket4 | Bucket5 | Tank |
|-----|---------|---------|---------|---------|---------|------|
| 100 | 100 | 0 | 0 | 0 | 0 | 0 |
| 200 | 100 | 200 | 0 | 0 | 0 | 0 |
| 300 | 100 | 200 | 300 | 0 | 0 | 0 |
| 400 | 100 | 200 | 300 | 400 | 0 | 0 |
| 500 | 100 | 200 | 300 | 400 | 500 | 0 |
| 950 | 0 ** | 200 | 300 | 400 | 500 | 1000 |
| 950 | 950 | 200 | 300 | 400 | 500 | 1000 |
| 950 | 920 | 0 *** | 300 | 400 | 500 | 2000 |

In ** and ***, after the buckets are full, 1,000 units of water has be put into the water tank.