New Year's '16 P3 - Arithmetic Snowman

Time limit: 1.4s **Memory limit:** 64M

k_53P loves to build snowmen. But his favorite type has to be *arithmetic snowmen*. An arithmetic snowman consists of 3 snowballs whose sizes, when arranged in a non-decreasing order, form an arithmetic sequence. For example, **k_53P** can make an arithmetic snowman out of snowballs of sizes 1, 3, and 5.

The size of an arithmetic snowman is the sum of the sizes of the snowballs that it's made of. **k_53P** has made N snowballs of various sizes, find the largest arithmetic snowman he can make!

Constraints

Subtask 1 [50%]

$3 \leq N \leq 100$

$1 \leq size \leq 100$

Subtask 2 [50%]

$3 \leq N \leq 3000$

$1 \leq size \leq 10^5$

Input Specification

The first line of input will contain N, the number of snowballs.

The second line of input will contain N space-separated integers, the sizes of the snowballs.

Output Specification

One integer, the size of the largest arithmetic snowman **k_53P** can build. It is guaranteed that he can build at least one.

Sample Input

```
7
4 2 8 10 14 3 7
```

Sample Output

```
24
```

Explanation for Sample Output

k_53P will use the snowballs of sizes 2, 8, and 14 to make the snowman.