# Mock CCC '23 2 S2 - Keenan Hates Triangles

**Time limit:** 0.25s **Memory limit:** 1G

Keenan got $N$ sticks for his birthday! As part of his birthday present, he tries to make two triangles out of them!

In order for three sticks with lengths $a$, $b$, and $c$ to form a triangle, it must be the case that $a + b > c$, $b + c > a$, and $c + a > b$.

Keenan wants to maximize the sum of the perimeters of the two triangles he makes. Help him compute this! Note that a stick cannot be used in both triangles.

## Constraints

$1 \leq N \leq 10^5$

$1 \leq a_i \leq 10^{15}$

## Input Specification

The first line contains one integer, $N$.

Each of the next $N$ lines contains one integer, $a_i$.

## Output Specification

Output the maximum possible sum of the perimeters of the two triangles Keenan makes. If Keenan cannot make two triangles, output `0`.

## Sample Input

```
6
1
1
1
1
1
1
```

## Sample Output

```
6
```