Problem B
JAG Box

Time Limit: 2 seconds

The JAG Box is an ordinary rectangular box that is currently popular around the world. There are N JAG Boxes. For each $i = 1, 2, \ldots, N$, the i-th box has an integer weight A_i.

You will build a vertical stack by repeatedly choosing one remaining box and inserting it at the very bottom of the current stack. When a box of weight w is inserted at the bottom of the existing stack whose total weight is x, that box receives load equal to $\left\lfloor \frac{x}{w} \right\rfloor$.

Determine the minimum possible total load over all boxes.

Input

The input is given in the following format:

N
$A_1\ A_2\ \ldots\ A_N$

- $2 \leq N \leq 200\,000$
- $1 \leq A_i \leq 10^9$ $(1 \leq i \leq N)$
- All input values are integers.

Output

Output the answer in a single line.

Sample Input	Sample Output
5 3 1 4 1 5	3