

## Problem C. Clique Coloring

Input file: *standard input*  
Output file: *standard output*  
Time limit: 1 second  
Memory limit: 256 mebibytes

There is a complete graph with  $m$  vertices. Initially, the edges of the graph are not colored. Snuke performed the following operation for each  $i(1 \leq i \leq n)$ : Choose  $a_i$  vertices from the graph and paint all edges that connect two of the chosen points with color  $i$ . It turned out that no edges were painted more than once. Compute the minimal possible value of  $m$ .

### Input

First line of the input contains one integer  $n$  ( $1 \leq n \leq 5$ ). Then  $n$  lines follow,  $i$ -th of these lines contains one integer  $a_i$  ( $2 \leq a_i \leq 10^9$ ).

### Output

Print the minimal possible value of  $m$ .

### Examples

standard input	standard output
2 3 3	5
5 2 3 4 5 6	12

### Note

Number the vertices of the graph: 1, 2, 3, 4, 5. For example, you can color the graph in the following way:

- Choose three vertices 1, 2, 3 and color edges between them with color 1.
- Choose three vertices 1, 4, 5 and color edges between them with color 2.