Building game

We have N cubes in a building game.

Create a program that:

    a) Gives the total volume of an object that can be built
       by using all cubes.
    b) Gives the index of the smallest cube.

Input

The first line of the *standard input* contains the number of cubes (1≤N≤100). The next N lines contain the length of each cube's sides (1≤L≤100).

Output

The first line of the *standard output* should contain the total volume of the object.

The second line of the *standard output* should contain the smallest cube's index (if there's multiple, give the first one).

Example

Input	Output
3	99
2	1
3	
4	