

6336 Draw Something

Wangpeng is good at drawing. Now he wants to say numbers like “521” to his girlfriend through the game draw something.

Wangpeng can't write the digit directly. So he comes up a way that drawing several squares and the total area of squares is the number he wants to say.

Input all the square Wangpeng draws, what's the number in the picture?

Input

There are multiple test cases.

For each case, the first line contains one integer N ($1 \leq N \leq 100$) indicating the number of squares.

Second line contains N integers a_i ($1 \leq a_i \leq 100$) represent the side length of each square. No squares will overlap.

Input ends with $N = 0$.

Output

For each case, output the total area in one line.

Sample Input

```
4
1 2 3 4
3
3 3 3
0
```

Sample Output

```
30
27
```