Paiz's Bakery

Jealous of Deyon's flower making business, Paiz decided to open up a bakery where he sells bread. To attract customers, his bakery is very unique where no bread in stock has a same price. Because Paiz loves Binary Search Tree, he also arranged his breads according to BST's principles, where the breads are sorted based on their unique price!

One day, Deyon decided to visit his friend's bakery to buy some breads for his birthday party. Deyon ended up buying every bread in stock, but because he is curious, Deyon wanted to know the average price of the breads for each level. Unfortunately, Paiz only knows how to sell bread and don't know how to calculate what Deyon wanted :(, so he asked for your help to code a program to fulfill what Deyon asked for.

Input Format

- First line is `T`, the number of test cases
- Until input is `-1`, continue receiving the bread prices `Ti`

Constraints

$1 \leq T \leq 100$

$1 \leq Ti \leq 10000$

Output Format

For each level, print the average prices for that level. Rounded up to 2 decimal precision.

Sample Input 0

```
1
5500
7000
8000
3000
2000
4000
6000
-1
```

Sample Output 0

```
Level 0 = 5500.00
Level 1 = 5000.00
Level 2 = 5000.00
```