

## Decoration Discount

Chef wants to decorate his house a bit, so he decides to buy **exactly two** flower vases.

The shop he visits has  $N$  flower vases, all arranged in a line.

The price of the  $i$ -th vase is  $A_i$ . It's guaranteed that all  $A_i$  are even.

If Chef buys vase number  $i$ , the price of vase number  $i + 1$  will be halved.

No other discounts are available.

Find the minimum cost of buying **two different vases**.

## Input Format

- The first line of input will contain a single integer  $T$ , denoting the number of test cases.
- Each test case consists of two lines of input.
  - The first line of each test case contains a single integer  $N$  — the number of vases in the store.
  - The second line contains  $N$  space-separated integers  $A_1, A_2, \dots, A_N$  — the prices of the vases.

## Output Format

For each test case, output on a new line the answer: the minimum cost of buying two different vases.

## Constraints

- $1 \leq T \leq 100$
- $2 \leq N \leq 100$
- $2 \leq A_i \leq 100$
- Each  $A_i$  is even.

## Sample 1:

Input	Output
3	17
4	18
10 14 18 8	14
4	
10 18 14 8	
5	
12 18 2 28 16	

## Explanation:

**Test case 1:** Chef should buy the first and second vases.

Buying vase 1 halves the price of vase 2, so the overall cost is  $10 + \frac{14}{2} = 10 + 7 = 17$ .