
Smallest Pair

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

Given a number N and an array A of N numbers. Print **the smallest** possible result of $A_i + A_j + j - i$, where $1 \leq i < j \leq N$.

Input

The first line contains a number T ($1 \leq T \leq 100$) number of test cases.

Each test case contains two lines:

- The first line consists a number N ($2 \leq N \leq 100$) number of elements.
- The second line contains N numbers ($-10^6 \leq A_i \leq 10^6$).

Output

For each test case print a single line contains **the smallest** possible sum for the corresponding test case.

Example

standard input	standard output
1 4 20 1 9 4	7

Note

First Case :

All possibles (i,j) where $(1 \leq i < j \leq N)$ are :

$i = 1, j = 2$ then result $= a_1 + a_2 + j - i = 20 + 1 + 2 - 1 = 22$.

$i = 1, j = 3$ then result $= a_1 + a_3 + j - i = 20 + 9 + 3 - 1 = 31$.

$i = 1, j = 4$ then result $= a_1 + a_4 + j - i = 20 + 4 + 4 - 1 = 27$.

$i = 2, j = 3$ then result $= a_2 + a_3 + j - i = 1 + 9 + 3 - 2 = 11$.

$i = 2, j = 4$ then result $= a_2 + a_4 + j - i = 1 + 4 + 4 - 2 = 7$.

$i = 3, j = 4$ then result $= a_3 + a_4 + j - i = 9 + 4 + 4 - 3 = 14$.

So the smallest possible result is 7.