

Problem Statement

Русский \ | /

Array A contains the elements, $A_1, A_2 \dots A_N$. And array B contains the elements, $B_1, B_2 \dots B_N$. There is a relationship between A_i and B_i , $\forall 1 \leq i \leq N$, i.e., any element A_i lies between 1 and B_i .

Let cost S of an array A is defined as:

$$S = \sum_{i=2}^N |A_i - A_{i-1}|$$

You have to print the largest possible value of S .

Input Format

The first line contains, T , the number of test cases. Each test case contains an integer, N , in first line. The second line of each test case contains N integers that denote the array B .

Output Format

For each test case, print the required answer in one line.

Constraints

$$1 \leq T \leq 20$$

$$1 \leq N \leq 10^5$$

$$1 \leq B_i \leq 100$$

Sample Input

```
1
5
10 1 10 1 10
```

Sample Output

```
36
```

Explanation

The maximum value occurs when $A_1=A_3=A_5=10$ and $A_2=A_4=1$.