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# Sherlock and Cost **■**



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### Русский \| 中文

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

Let the cost S of an array A be 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*.

## Constraints

 $1 \le T \le 20$   $1 \le N \le 10^5$   $1 \le B_i \le 100$ 

# **Output Format**

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

#### **Sample Input**

1 5 10 1 10 1 10

# **Sample Output**

36

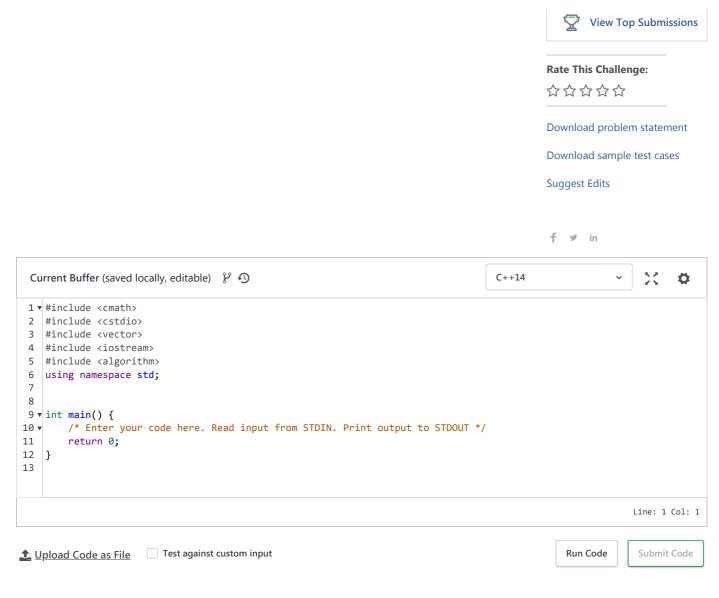
#### **Explanation**

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



## Need Help?

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