

Section : Coding

DIRECTIONS for the question: Mark the best option:

Question No: 105230

Problem Title:

BITONIC_SUBARRAY

Problem Statement

Sumita has given a task to find the maximum sum bitonic subarray. Note that A bitonic subarray is a subarray in which elements are first increasing and then decreasing. A strictly increasing or strictly decreasing subarray is also considered as bitonic subarray. Given that an array containing N numbers. Time Complexity : $O(n)$ Auxiliary Space : $O(1)$

Input

The first line of input contains an integer T denoting the number of test cases. Then T test cases follow. Each test case consists of two lines. First line of each test case contains a integer N and the second line contains N space separated array elements.

Output

For each test case, print the maximum bitonic subarray sum in new line.

Constraints

$1 \leq T \leq 200$ $1 \leq N \leq 10^5$ $1 \leq A[i] \leq 10^5$

Sample Test Cases

Input

2 7 5 3 9 2 7 6 4 7 5 4 3 2 1 10

Output

19 17

DIRECTIONS for the question: Solve the following question:

Question No: 105380

Problem Title:

Nothing_Given

Problem Statement

Solve the mystery. Using sample input and output, figure out the logic to solve the question.

Input

First number is T, the number of test cases. Next T numbers are integers, N.

Output

Print T lines containing an answer corresponding to the T input numbers.

Constraints

$1 \leq T \leq 10^4$ $1 \leq N \leq 10^8$

Sample Test Cases

Input

10 2 6 12 60 5 169 1 8 23 1

Output

2 4 6 12 2 3 1 4 2 9