



(/en/),  
v1.1.0

## CSD Testing System

(/en/)

# Maximize the value of expression $A[s] - A[r] + A[q] - A[p]$

Cost: 10 | Solved: 27

**Memory limit:** 256 MBs

**Time limit:** 1 s

**Input:** input.txt

**Output:** output.txt

### Task:

You are given an array  $A[]$  of  $n$  integers.

You have to find elements with such indices  $s, r, q, p$ , ( $s > r > q > p$ ) that will provide the maximal value of expression  $A[s] - A[r] + A[q] - A[p]$ .

### Input:

The first line contains a natural  $n$  ( $4 \leq n \leq 10^6$ ) – the quantity of elements of the array.

The second line contains  $n$  numbers – the elements of the array.

### Output:

The maximal value of the expression.

### Example:

Input	Output
4 1 1 1 1	0

6 3 9 10 1 30 40	46
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