

Matching

Input file: standard input
Output file: standard output
Time limit: 1 second
Memory limit: 1024 megabytes

Given an integer sequence a_1, a_2, \dots, a_n of length n , we construct an undirected graph G from the sequence. More precisely, for all $1 \leq i < j \leq n$, if $i - j = a_i - a_j$, there will be an undirected edge in G connecting vertices i and j . The weight of the edge is $(a_i + a_j)$.

Find a matching of G so that the sum of weight of all edges in the matching is maximized, and output this maximized sum.

Recall that a matching of an undirected graph means that we choose some edges from the graph such that any two edges have no common vertices. Specifically, not choosing any edge is also a matching.

Input

There are multiple test cases. The first line of the input contains an integer T indicating the number of test cases. For each test case:

The first line contains an integer n ($2 \leq n \leq 10^5$) indicating the length of the sequence.

The second line contains n integers a_1, a_2, \dots, a_n ($-10^9 \leq a_i \leq 10^9$) indicating the sequence.

It's guaranteed that the sum of n of all test cases will not exceed 5×10^5 .

Output

For each test case output one line containing one integer indicating the maximum sum of weight of all edges in a matching.

Example

standard input	standard output
3	30
9	0
3 -5 5 6 7 -1 9 1 2	0
3	
-5 -4 -3	
3	
1 10 100	

Note

For the first sample test case, the optimal choice is to choose the three edges connecting vertex 3 and 5, vertex 4 and 7, and finally vertex 8 and 9. The sum of weight is $(5 + 7) + (6 + 9) + (1 + 2) = 30$.

For the second sample test case, as all edges have negative weights, the optimal matching should not choose any edge. The answer is 0.

For the third sample test case, as there is no edge in the graph, the answer is 0.