Question The maximum sum You are given an undirected tree with N nodes. Each node of the tre Note Find the maximum path sum between any two nodes. Both the node

- The path sum between two nodes (u,v) is equal to the sum of By path, here you must consider a simple path between two not nodes u, u1, u2, ..., v , where all the nodes are distinct and ad
- The first line has an integer T denoting the number of test cases

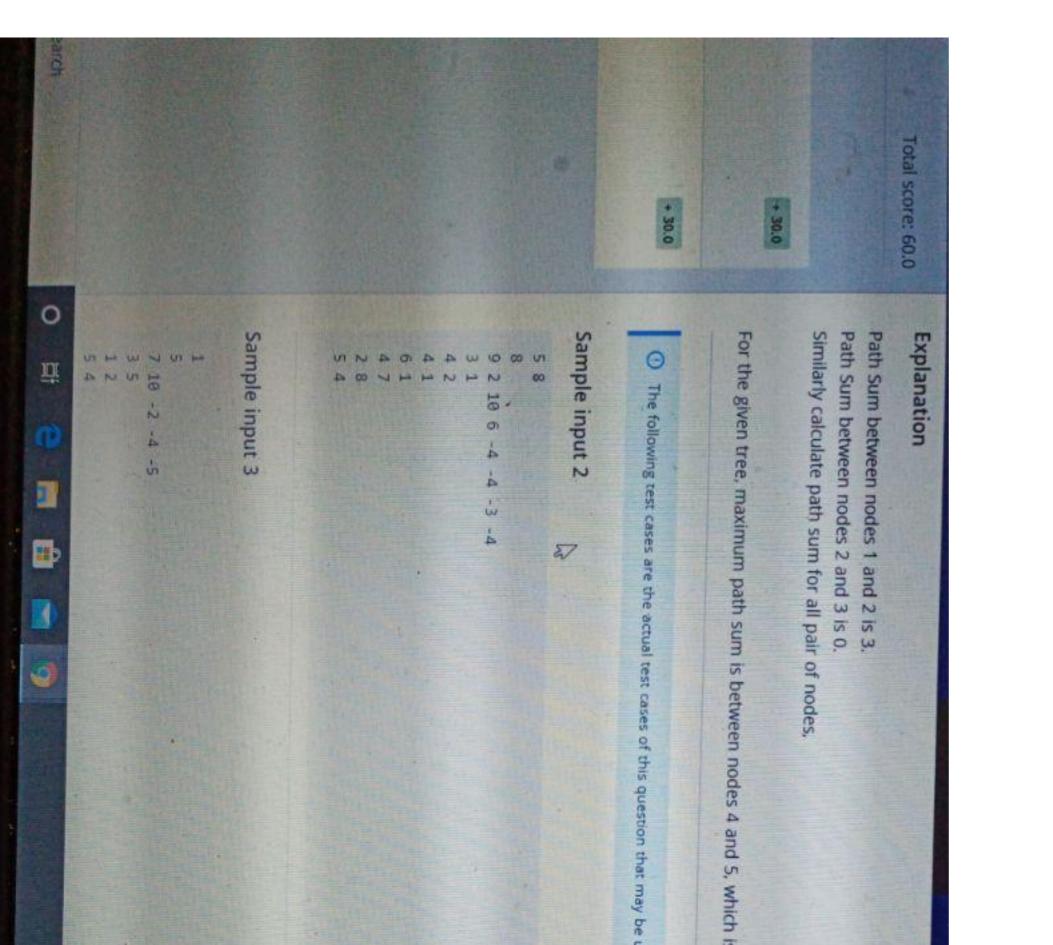
Input format

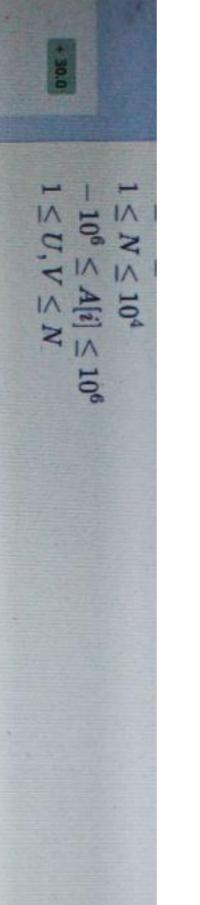
- The first line of each test case contains an integer N denoting th
- The second line of each test case N space seperated integers de
- Next N I lines of each test case have two integers U and V o

Output format

oting the maximum path sum for each test case in a ne

Constraints $1 \le T \le 1$





Sample input 1

Col

Explanation

Similarly calculate path sum for all pair of nodes. Path Sum between nodes 1 and 2 is 3.

Path Sum between nodes 2 and 3 is 0.

For the given tree, maximum path sum is between nodes 4 and 5, which is 11.

1 The following test cases are the actual test cases of this question that may be used to









