score: 60.0

+ 30.0

+ 30.0

Question 2

The maximum sum

You are given an undirected tree with N nodes. Each node of the tre

Find the maximum path sum between any two nodes. Both the node

Note

- By path, here you must consider a simple path between two noc nodes $u, u_1, u_2, \ldots, v$, where all the nodes are distinct and ad
- The path sum between two nodes (u, v) is equal to the sum of

Input format

- The first line has an integer T denoting the number of test cases
- 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 $N-1$ lines of each test case have two integers U and V d

Output format

An integer denoting the maximum path sum for each test case in a ne

Constraints

$1 \leq T \leq 10$

$1 \leq N \leq 10^4$

$-10^6 \leq A[i] \leq 10^6$

Total score: 60.0

+ 30.0

+ 30.0

Explanation

Path Sum between nodes 1 and 2 is 3.
Path Sum between nodes 2 and 3 is 0.
Similarly calculate path sum for all pair of nodes,

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

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

Sample input 2

```
5 8
8
9 2 10 6 -4 -4 -3 -4
3 1
4 2
4 1
6 1
4 7
2 8
5 4
```

Sample input 3

```
1
5
7 10 -2 -4 -5
3 5
1 2
5 4
```

earch

$1 \leq N \leq 10^4$

$-10^6 \leq A[i] \leq 10^6$

$1 \leq U, V \leq N$

+ 30.0

+ 30.0

Sample input 1

```
1
5
4 -1 -3 5 7
1 2
1 3
2 4
2 5
```

Explanation

Path Sum between nodes 1 and 2 is 3.
Path Sum between nodes 2 and 3 is 0.
Similarly calculate path sum for all pair of nodes.

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

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