**Problem:** [**https://www.hackerrank.com/challenges/journey-to-the-moon/problem**](https://www.hackerrank.com/challenges/journey-to-the-moon/problem)

**Approach:**

-> Use DSU to connect nodes of the same city, and because we use **union by size** , the root of every component will have information about size of the component, which we can use later to find the final answer.

ans = a\*(b+c+d) + b\*(c+d) + c\*d , where a,b,c,d are sizes of country.can be upto ‘n’.

**Code:** [**https://www.hackerrank.com/challenges/journey-to-the-moon/submissions/code/233906177**](https://www.hackerrank.com/challenges/journey-to-the-moon/submissions/code/233906177)