# Floki The Boat Builder

Floki the boat builder is building boats for Ragnar Lodbrok using a unique tree which is rooted at 0 and has N nodes. Each node i has a value val[i] associated with it.

Floki selects two nodes of the tree, X and Y, for making a boat. The build process will only be successful if X and Y belong to different subtrees and the GCD of (GCD of X subtree and GCD of Y subtree) are known to Floki.

If X and Y given to you are from different subtrees find the final GCD of subtrees. Otherwise, return -1.

#### Example 1:

```
Input: N = 5, X = 2, Y = 1
edges = {{0, 1}, {0, 2}, {1, 4}, {2, 3}}
val[] = {30, 24, 10, 20, 16}
Output: 2
Explanation: Gcd of subtree 2 is 10, Gcd
of subtree 1 is 8, gcd of 10 and 8 is 2.
```

## Example 2:

```
Input: N = 5, X = 4, Y = 1
edges = {{0, 1}, {0, 2}, {1, 4}, {2, 3}}
val = {30, 24, 10, 20, 16}
Output: -1
Explanation: 1 and 4 belongs to same subtree.
```

### Your Task:

You don't need to read input or print anything. Complete the function **gcdTree()** which takes **N, X, Y**, a list of pairs of {start,end} denoting the **edges** and a list of integers **val[]** containing the value of each node in the tree, as input parameters and returns the GCD of subtrees or -1.

## Constraints:

 $2 \le N \le 10^5$ Number of edges = N - 1  $0 \le val[i] \le 10^5$