

5908. Count Nodes With the Highest Score

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There is a **binary** tree rooted at `0` consisting of `n` nodes. The nodes are labeled from `0` to `n - 1`. You are given a **0-indexed** integer array `parents` representing the tree, where `parents[i]` is the parent of node `i`. Since node `0` is the root, `parents[0] == -1`.

Each node has a **score**. To find the score of a node, consider if the node and the edges connected to it were **removed**. The tree would become one or more **non-empty** subtrees. The **size** of a subtree is the number of the nodes in it. The **score** of the node is the **product of the sizes** of all those subtrees.

Return the **number** of nodes that have the **highest score**.

User Accepted:0

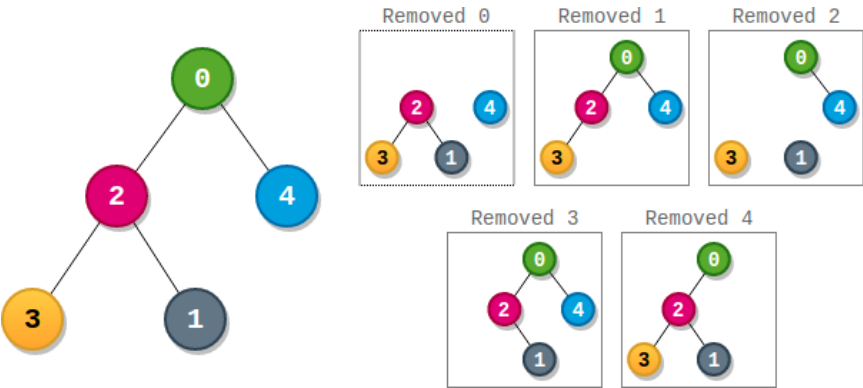
User Tried:0

Total Accepted:0

Total Submissions:0

Difficulty:Medium

Example 1:

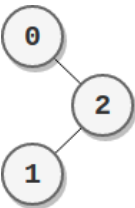


**Input:** `parents = [-1,2,0,2,0]`  
**Output:** `3`  
**Explanation:**

- The score of node 0 is:  $3 * 1 = 3$
- The score of node 1 is:  $4 = 4$
- The score of node 2 is:  $1 * 1 * 2 = 2$
- The score of node 3 is:  $4 = 4$
- The score of node 4 is:  $4 = 4$

The highest score is 4, and three nodes (node 1, node 3, and node 4) have the highest score.

Example 2:



**Input:** `parents = [-1,2,0]`  
**Output:** `2`  
**Explanation:**

- The score of node 0 is:  $2 = 2$
- The score of node 1 is:  $2 = 2$
- The score of node 2 is:  $1 * 1 = 1$

The highest score is 2, and two nodes (node 0 and node 1) have the highest score.

- Constraints:
- `n == parents.length`

- $2 \leq n \leq 10^5$
- `parents[0] == -1`
- $0 \leq \text{parents}[i] \leq n - 1$  for  $i \neq 0$
- `parents` represents a valid binary tree.


JavaScript



```
1 /**
2  * @param {number[]} parents
3  * @return {number}
4  */
5 var countHighestScoreNodes = function(parents) {
6
7 };
```

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