

802. Find Eventual Safe States

Medium

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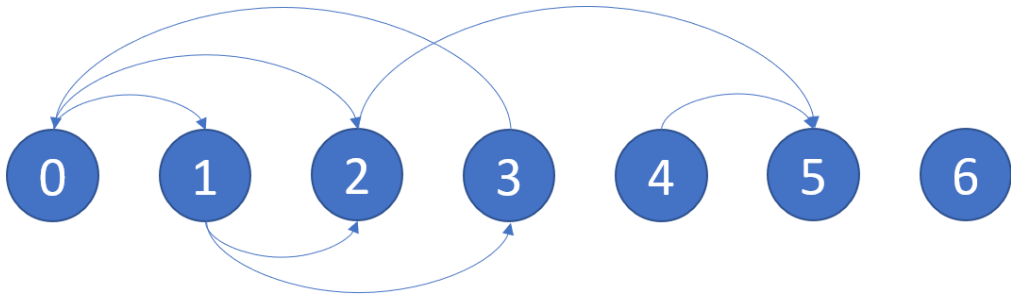
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There is a directed graph of n nodes with each node labeled from 0 to $n - 1$. The graph is represented by a **0-indexed** 2D integer array `graph` where `graph[i]` is the list of nodes `j` such that there is a directed edge from node `i` to node `j`.

A node is a **terminal node** if there are no outgoing edges. A node is a **safe node** if every possible path starting from that node leads to a terminal node (or another safe node).

Return an array containing all the **safe nodes** of the graph. The answer should be sorted in **ascending** order.

Example 1:



Input: `graph = [[1,2],[2,3],[5],[0],[5],[],[[]]]`
Output: `[2,4,5,6]`
Explanation: The given graph is shown above.
Nodes 5 and 6 are terminal nodes as there are no outgoing edges from either of them.
Every path starting at nodes 2, 4, 5, and 6 all lead to either node 5 or 6.

Example 2:

Input: `graph = [[1,2,3,4],[1,2],[3,4],[0,4],[[]]]`
Output: `[4]`
Explanation:
Only node 4 is a terminal node, and every path starting at node 4 leads to node 4.

Constraints:

- $n == \text{graph.length}$
- $1 \leq n \leq 10^4$
- $0 \leq \text{graph}[i].\text{length} \leq n$
- $0 \leq \text{graph}[i][j] \leq n - 1$
- `graph[i]` is sorted in a strictly increasing order.
- The graph may contain self-loops.
- The number of edges in the graph will be in the range $[1, 4 * 10^4]$.

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