

## Eventual Safe States

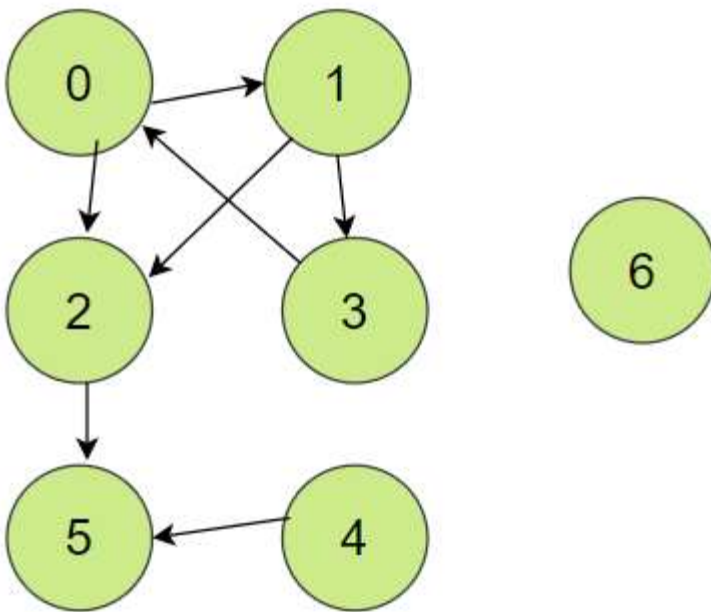
A directed graph of  $V$  vertices and  $E$  edges is given in the form of an adjacency list **adj**. Each node of the graph is labelled with a distinct integer in the range  $0$  to  $V - 1$ .

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**.

You have to return an array containing all the **safe nodes** of the graph. The answer should be sorted in **ascending** order.

**Example 1:**

**Input:**



**Output:**

2 4 5 6

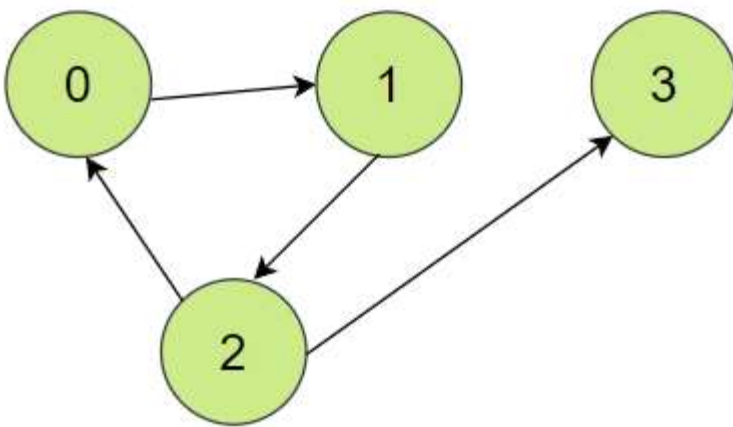
**Explanation:**

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:**



**Output:**

3

**Explanation:**

Only node 3 is a terminal node, and every path starting at node 3 leads to node 3.

### Your Task:

You don't need to read or print anything. Your task is to complete the function **eventualSafeNodes()** which takes an integer **V** denoting no. of vertices and **adj** denoting adjacency list of the graph and returns an array of **safe nodes**.

**Expected Time Complexity:**  $O(V + E)$

**Expected Space Complexity:**  $O(V)$

**Constraints:**

- $1 \leq V \leq 10^4$
- $0 \leq E \leq 10^4$
- The graph won't contain self loops.
- Each node in the graph has a distinct value in the range 0 to  $V - 1$ .