# 2876. Count Visited Nodes in a Directed Graph

## Description

There is a directed graph consisting of n nodes numbered from 0 to n - 1 and n directed edges.

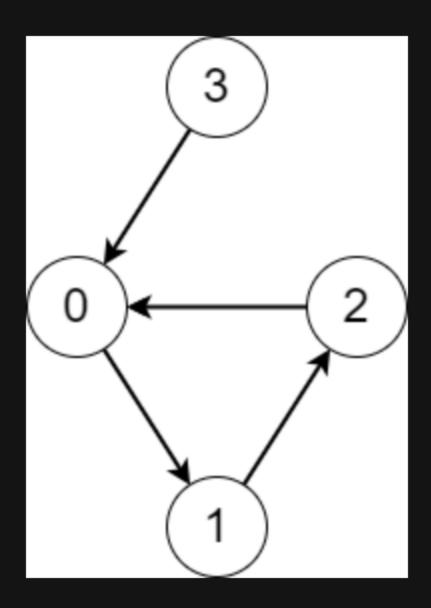
You are given a **0-indexed** array edges where edges[i] indicates that there is an edge from node i to node edges[i].

Consider the following process on the graph:

• You start from a node x and keep visiting other nodes through edges until you reach a node that you have already visited before on this same process.

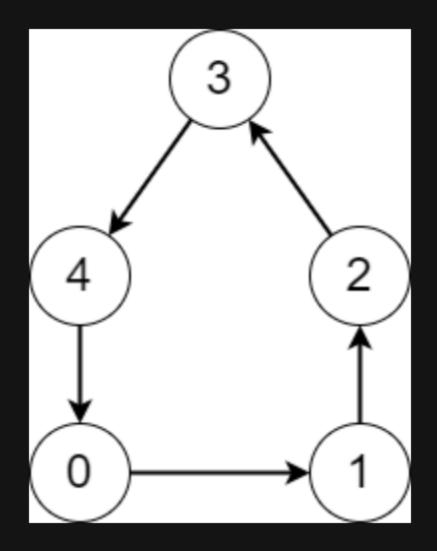
Return an array answer where answer[i] is the number of different nodes that you will visit if you perform the process starting from node i.

#### Example 1:



```
Input: edges = [1,2,0,0]
Output: [3,3,3,4]
Explanation: We perform the process starting from each node in the following way:
- Starting from node 0, we visit the nodes 0 -> 1 -> 2 -> 0. The number of different nodes we visit is 3.
- Starting from node 1, we visit the nodes 1 -> 2 -> 0 -> 1. The number of different nodes we visit is 3.
- Starting from node 2, we visit the nodes 2 -> 0 -> 1 -> 2. The number of different nodes we visit is 3.
- Starting from node 3, we visit the nodes 3 -> 0 -> 1 -> 2 -> 0. The number of different nodes we visit is 4.
```

#### Example 2:



```
Input: edges = [1,2,3,4,0]
Output: [5,5,5,5,5]
Explanation: Starting from any node we can visit every node in the graph in the process.
```

### **Constraints:**

- n == edges.length
- 2 <= n <= 10 <sup>5</sup>
- 0 <= edges[i] <= n 1
- edges[i] != i