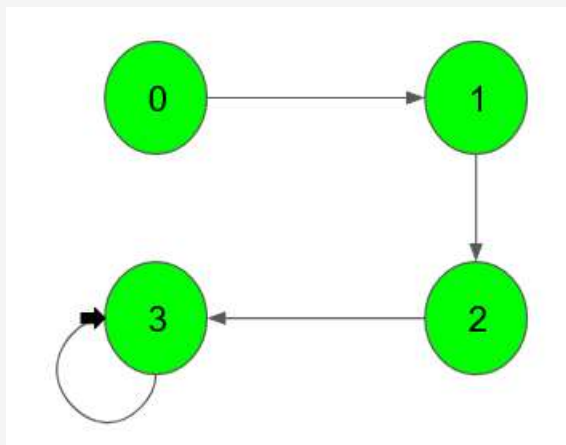


Detect cycle in a directed graph

Given a Directed Graph with **V** vertices (Numbered from **0** to **V-1**) and **E** edges, check whether it contains any cycle or not.

Example 1:

Input:

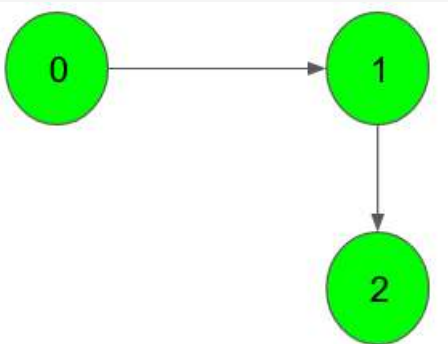


Output: 1

Explanation: 3 -> 3 is a cycle

Example 2:

Input:



Output: 0

Explanation: no cycle in the graph

Your task:

You dont need to read input or print anything. Your task is to complete the function **isCyclic()** which takes the integer V denoting the number of vertices and adjacency list as input parameters and returns a boolean value denoting if the given directed graph contains a cycle or not.

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

Expected Auxiliary Space: $O(V)$

Constraints:

$$1 \leq V, E \leq 10^5$$

Input Format:

First line of the custom input must contain two space separated integers V denoting the number of vertices and E denoting the number of edges. Next E lines contains two space-separated integers denoting each edge.

Example:

```
4 4
0 1
1 2
2 3
3 3
```