

## Detect cycle in an undirected graph

Given an undirected graph with  $V$  vertices and  $E$  edges, check whether it contains any cycle or not. Graph is in the form of adjacency list where  $\text{adj}[i]$  contains all the nodes  $i$ th node is having edge with.

### Example 1:

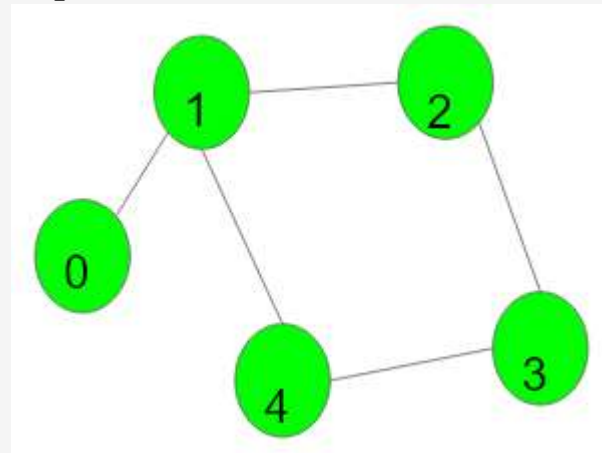
**Input:**

$V = 5, E = 5$

$\text{adj} = \{\{1\}, \{0, 2, 4\}, \{1, 3\}, \{2, 4\}, \{1, 3\}\}$

**Output:** 1

**Explanation:**



1->2->3->4->1 is a cycle.

### Example 2:

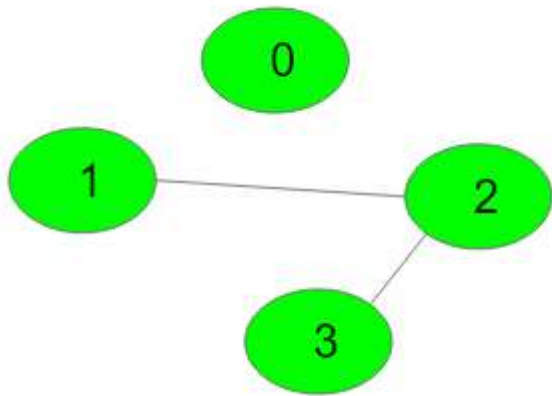
**Input:**

$V = 4, E = 2$

$\text{adj} = \{\{\}, \{2\}, \{1, 3\}, \{2\}\}$

**Output:** 0

**Explanation:**



No cycle in the graph.

**Your Task:**

You don't need to read or print anything. Your task is to complete the function **isCycle()** which takes  $V$  denoting the number of vertices and adjacency list as input parameters and returns a boolean value denoting if the undirected graph contains any cycle or not, return 1 if a cycle is present else return 0.

**NOTE:** The adjacency list denotes the edges of the graph where  $\text{edges}[i]$  stores all other vertices to which  $i$ th vertex is connected.

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

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

**Constraints:**

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