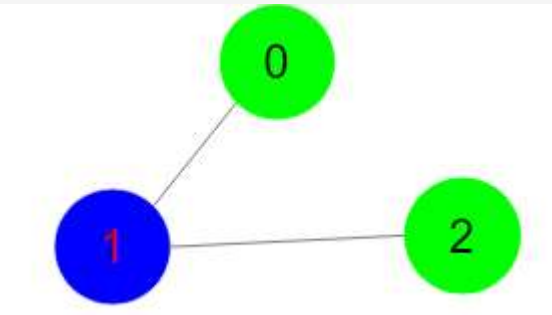
Bipartite Graph

Given an adjacency list of a graph **adj** of V no. of vertices having 0 based index. Check whether the graph is bipartite or not.

Example 1:

Input:

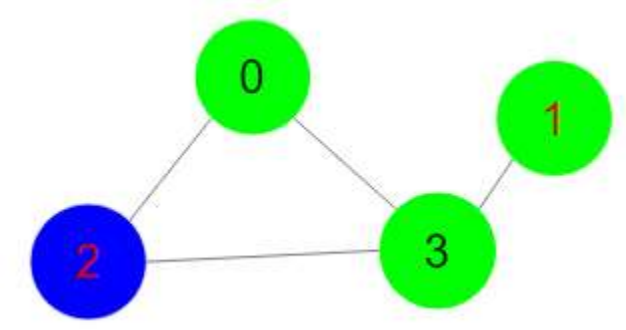


Output: 1

Explanation: The given graph can be colored in two colors so, it is a bipartite graph.

Example 2:

Input:



Output: 0

Explanation: The given graph cannot be colored in two colors such that color of adjacent vertices differs.

Your Task:
You don't need to read or print anything. Your task is to complete the function **isBipartite()** which takes V denoting no. of vertices and adj denoting adjacency list of the graph and returns a boolean value true if the graph is bipartite otherwise returns false.

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

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