

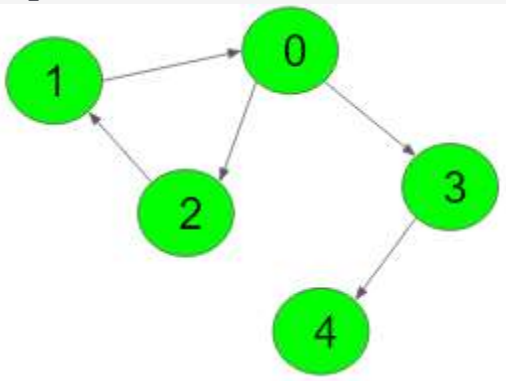
Mother Vertex

Given a Directed Graph, find a Mother Vertex in the Graph (if present).

A Mother Vertex is a vertex through which we can reach all the other vertices of the Graph.

Example 1:

Input:

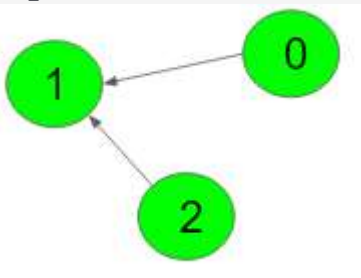


Output: 0

Explanation: According to the given edges, all nodes can be reached from nodes 0, 1 and 2. But, since 0 is minimum among 0, 1 and 2, so 0 is the output.

Example 2:

Input:



Output: -1

Explanation: According to the given edges, no vertices are there from where we can reach all vertices. So, output is -1.

Your Task:

You don't need to read or print anything. Your task is to complete the function **findMotherVertex()** which takes V denoting the number of vertices and adjacency list as input parameter and returns the vertex from through which we can traverse all other vertices of the graph. If there is more than one possible nodes then returns the node with minimum value. If not possible returns -1.

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

Expected Space Complexity: $O(V)$

Constraints:

$$1 \leq V \leq 500$$