

Graph Traversal Practice problems:

Try to solve the following problems for the adjacency matrix representation.

1. Write a function *hasCycle (int s)* that takes a node as argument, and detect if there is a cycle starting at that node. Use DFS for this.
2. Write a function *hasCycle ()* that detects if there is any cycle in the whole graph. Use both BFS and DFS for this.
3. Write a function *findPath (int s, int d)* that takes two nodes as argument, and find a path from first node to the second node. Use DFS for this.
4. Write a function *findPathWeight(int s, int d)* that takes two nodes as argument, and find the total weight of any path from first node to the second node. Use DFS for this.