

Data Structures and Algorithms Lab

12. Graph Traversal Algorithms

Subject Code: 17ESCP201

Lab No: 12

Semester: III

Date: Nov 2017

Batch: MSM

Question: Implementing DFS and BFS

Objective: Understanding breadth and depth wise graph traversals

As important are food and air to us, so important are Depth First Search (DFS) and Breadth First Search (BFS) in graph algorithms.

Having known the concept and why tree traversals do not work on graphs, let us implement both the algorithms. A starter code is provided to you. The code will have to be completed and tested through discussion and examples.

Quick Recap:

Depth-first search is an algorithm for traversing or searching tree or graph data structures. One starts at the root and explores as far as possible along each branch before backtracking.

Data structure: Graph

Class: Search algorithm

Breadth-first search is an algorithm for traversing or searching tree or graph data structures. It starts at the tree root and explores the neighbor nodes first, before moving to the next level neighbors.

Data structure: Graph

Class: Search algorithm

**** Happy Coding ****