ACADEMY OF TECHNOLOGY

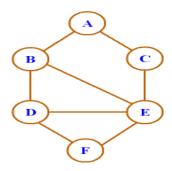


Lab Assignment (Day 5)

Paper name: Design and Analysis of Algorithms Lab Code: PCC-CS494 Semester: 4^{th} Discipline: CSE Time: 2 Hours

Date: May 13, 2021

- 1. Write a program in C or C++ to sort a given array of elements using the Quick Sort algorithm.
- 2. Write a program in C or C++ to implement the Breadth-First-Search algorithm using adjacency matrix. You may use the following graph as an Input graph. You must use the file for graph input.



3. Write a program in C or C++ to implement a) iterative Depth-First-Search and b) recursive Depth-First-Search algorithm using adjacency matrix. You may use the same graph as the input graph.