

Lab11 Assignment – DFS, Sorting

Problem 1: DFS

Write a program that reads in a directed graph and a source vertex and performs a DFS on the graph. Print the timestamps for each vertex. Also print the tree edges, the back, forward and cross edges in the resulting DFS tree.

Problem 2: Merge-Sort

Write a program to implement the Mergesort algorithm.

Problem 3: Quicksort

Write a program to implement the in-place Quicksort algorithm.