

Data Structure Assignment_2

Topics:

- ☐ Stack
- ☐ Queue
- ☐ Big O rules & calculate time complexity.
- ☐ Binary Tree.
- ☐ Graphs

Theoretical Questions : (PDF)

- ☐ What is the differences between Adjacency List and Adjacency Matrix representation of Graph.

Lab Questions : (CODE)

1. Write a function to reverse a string using Stack.
2. Write a function to sort a stack using only another Stack.
3. Write a function to reverse the order of elements in a queue.
4. Implement a priority queue where the smallest element is dequeue first.
5. Write a function to merge two sorted queues into a single sorted queue.

Submission Requirements

- Create Repository in GitHub named Assignments and push your assignments folder to it.
*In your assignment folder create package named assignment_1.
- Make sure your repository has readme file, write your name and group in it .example (Ali Alsadiq- Cyber Security – G2)
- Use comments in your code to specify each Question.
- Make sure your code is neat, readable, and runs without errors.



Deadline: end of semester.