

CS2023 - Data Structures and Algorithms

Take Home Assignment

Week 5 - Basic Data Structures

March, 2023

You are required to answer the below questions and submit a PDF to the submission link provided under this week before the deadline (no extensions will be provided). You can either write / type your answers, but either way your answers should be readable.

Question 1

Explain briefly what a double linked list and a circular linked list is?

Note: Please use diagrams in your explanations

Question 2

Write pseudo codes for the operations of a single linked list.

Question 3

How can you implement a stack and a queue using a linked list?

Note: Explain how you would do it and also write pseudo codes for all the operations.