
Lab-VIII
National Institute of Technology Silchar
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Subject Code: CS-201
Semester: 3rd
Course: B.Tech

Subject: Data Structures
Department: CSE
Section: A

You have to write the time complexities and space complexities in the lab copies for all questions.

1. Write a program to reverse the individual word of a given sentence.
2. Write a program to implement two stacks in a single array.
3. Write a program to sort the stack items using another stack.
4. Write a program to implement the following functions of a circular linked list-
 - (a) Insert an item
 - (b) Delete an item
5. Write a program to find the middle item of a circular linked list.
6. Detect whether a linked list contains a loop (cycle) or not.
7. Write a program to implement the following functions of the doubly linked list-
 - (a) Insert at front
 - (b) Insert at last
 - (c) Insert after the given item
 - (d) Insert before the given item
 - (e) Delete an item from the front
 - (f) Delete an item from the last
 - (g) Delete a given item
8. Write a program to rotate a doubly linked list k times.