

Sardar Vallabhbhai National Institute of Technology, SVNIT, Surat
B.Tech. CSE I Sem II (Sem-4)
Data Structures (CS102)
LAB Assignment 6

Goal:

- To understand the Linked List with its operations.
- To understand the use of memory allocation and deallocation functions.
- To write the reusable functions for later usage in this subject.

Write memory allocation/deallocation functions to perform the following and also prepare a header file with those functions to use them:

1. Write a program to implement stack using linked list. Perform necessary operations.
2. Write a program to input an n digit number. Now break this number into its individual digits and then store every single digit in a separate node thereby forming a linked list. For Example, you entered 235, then there will be 3 nodes in the list containing nodes with value 2, 3, 5.
3. Write a program to reverse the element of ABOVE singly linked list.