

CSD102- Data Structure

Practice Assignment #1

Grading Criteria: - No Grading Criteria.

Submission: - Not required.

1. Write a program to create the exponential function using recursion to compute 2^{16}
2. Write a program to find the median of two sorted arrays.
3. Given an integer array nums, return all the triplets [nums[i], nums[j], nums[k]] such that $i \neq j$, $i \neq k$, and $j \neq k$, and $nums[i] + nums[j] + nums[k] == 0$.
4. Write a program for Bubble sort using array.
5. Write a program to create three nodes for a linked list and display the same.
6. Write a program to search for a key in the doubly linked list.
7. Write a program to check for valid parenthesis using stack. Only "(" and ")" are allowed as input.
8. Create an empty queue, add three items, and remove 1 item. Print the queue at each step.
9. Write a program to reverse a String using Stack.
10. Write a program to swap every alternate pair in a doubly linked list.