

Single Linked list Assignments

1. Write a program to create linked list and perform the following operations on linked list?
 - a. Inserting a node at beginning of the list
 - b. Inserting a node at the end of the list
 - c. Inserting a node at given position(index)
 - d. Inserting a node at before the given value
 - e. Inserting a node at after the given value
 - f. Inserting a node at middle of the list
2. Write a program to create linked list and perform the following operations on the linked list?
 - a. Deleting a given node
 - b. Deleting the first node in the list
 - c. Deleting the last node in the list
 - d. Deleting the before given value node
 - e. Deleting the after given value node
 - f. Deleting the given position node(index)
 - g. Deleting the middle element in the list
3. Write a program to Traverse (print) the list of elements?
4. Write a program to print the elements of the list in reversal order?
5. Write a program to reverse the list with using recursion?
6. Write a program to reverse the list without using recursion?
7. Write a program to print length of the list?
8. Write a program to search the element in the list?
9. Write a program to print frequency of given element in the list?
10. Write a program to print all pairs in the list if the pair wise sum is equal to given value?
11. Write a program to sort the elements in the list?
12. Write a program to print middle element in the list?
13. Write a program to print minimum, maximum element in the given list?
14. Write a program to print sum and average of the all the nodes in the list?
15. Write a program to print the student details using linked list?
16. Write a program to print topper details in particular subject using linked list?
17. Write a program to check whether the given list is palindrome or not?(Eg:1->2->1)
18. Write a program to check list is string palindrome? Take each char as node?(Eg: m->a->d->a->m)
19. Write a program to print alternative nodes in the list?
20. Write a program to print prime numbers in the list?
21. Write a program to print the even sum and odd sum of the given list?
22. Write a program to print all distinct elements count in the list?
23. Write a program to find the Kth node from the end in a singly linked list?
24. Write a program to swap adjacent elements in the list?
25. Write a program to take words in the node and sort them in dictionary order?
26. Write a program to print elements of the list in reverse order from given element in the list?
27. Write a program to merge the two linked lists?
28. Write a program to delete the duplicate nodes in the from the sorted list?
29. Write a program to print intersection of two nodes at the beginning list?
30. Write a program to print mean, median, mode of the list?