

Dt: 18th May 2021

Assignments (Lab 5)

NB: This paragraph is common for all the questions. The programs should work for any value of N (as high it may be). What is the complexity of the algorithms? Please state the reason with a proper explanation [Write on a white paper and submit the scan copy with the assignment PDF file]. Each program should be run for at least TWO test cases. If you are assigning any memory through malloc() function, remember to free() up that memory at the end of the program.

1. Create a Linked List of size N, where each node will have a random floating point value and pointer to the next node. WAP to reverse the linked list based on a given GP series. The factor of the GP series will be taken as an user input. (Ex: 1, 2, 4, 8, 16..... : Factor 2).
2. Create a two-way Linked List of N Fibonacci numbers. N should be given as user input. WAP to delete the nodes in the two-way linked list based on a given GP series. The factor of the GP series will be taken as an user input. (Ex: 1, 2, 4, 8, 16..... : Factor 2).