

Data Structures - Session 1 - Assignments

1. A sub list is a part of list within a given window of positions named L and R, where L is the left position in list and R is the right position. Implement a linked list and write a method to rotate sub list in clockwise direction by the number of steps (N) given as input.
For Example:
Given Linked list is 2->3->4->5->6->7 and L=2, R=5 and N=2
Sublist is 3->4->5->6
Rotating the sublinklist 3->4->5->6 with N=2 the result would be 5->6->3->4. So, our new linked list is 2->5->6->3->4->7.
As an output display the modified linked list.
2. Write a method to detect loop in linked list.
3. Can you visualise the representation of a multivariate polynomial using a nested list?
Provide a function to find the degree of a multivariate polynomial.