SSN College of Engineering, Kalavakkam
Department of Computer Science and Engineering
III Semester - CSE 'A ',’B’ & ‘C’
UCS 1312 Data Structures Lab Laboratory

Academic Year: 2019-2020   **Batch: 2018-2022**

Exercise 3: Polynomial manipulation using linked list

Create two linked list for the following polynomial equations
1. $3x^{12} + 8x^8 - 22x^4 + 3x - 7$
2. $7x^{14} - 10x^9 - 8x^8 + 6x^5 - 9x$

Perform the following operations using a menu driven program
1. Create linked list for the polynomials
2. Polynomial addition by passing two polynomial lists as arguments and return the resultant polynomial list
3. Polynomial multiplication by passing two polynomial lists as arguments and return the resultant polynomial list
4. Display the given polynomials and the resultant polynomial.

Note:
3 files need to be maintained.
1. Structure and function definitions
2. Function prototypes
3. Application