# **CSE 4304**

# **Lab 3**

# **Group C**

# **24-01-2017**

*P(x) = 2x8 – 5x3 + x – 3*

|  |  |  |  |
| --- | --- | --- | --- |
| **Index** | **Co-efficient** | **Exponent** | **Link** |
| -->1 | 0 | -1 | 4 |
| ++2 |  |  | 3 |
| 3 |  |  | 8 |
| 4 | 2 | 8 | 5 |
| 5 | -5 | 3 | 6 |
| 6 | 1 | 1 | 7 |
| 7 | -3 | 0 | 0 |
| 8 |  |  | 0 |

--> Means header of the linked list

++ Header of the available list

**Task:**

1) Write a program that takes co-efficient and exponent of a polynomial equation and create a linked list as demonstrated above.

2) Your program needs to be able to insert a new term in the polynomial.

3) Your program needs to be able to delete a term from the polynomial.

4) You need to keep the data sorted so that you can print them (both array and the polynomial equation) appropriately when needed.

\*\*\*\*\*\*\* For enthusiast only (if solved rewards will be given in upcoming labs)

Create an interactive program that takes two polynomials, multiply them and display them appropriately.