

# **DATA STRUCTURES and ALGORITHMS**

## **HOMEWORK #4**

**Due Date 13-12-2022**

You are going to work on Huffman Coding in this homework. Please do the following;

- 1- Find the characters and their frequencies of a given text which will be read from letter.txt file.
- 2- Keep these in a sorted linked list.
- 3- Construct the huffman tree using this alfabet(characters).
- 4- Find the code of every character and display them.
- 5- Encode the given text(read it from a source.txt) and write the coded text into encoded.txt file.
- 6- Decode a given text(read it from an encoded.txt) and write the decoded text into decoded.txt file