

Lab2 (Due Feb 8)

Write a program for Huffman Coding. You might use the *priority queue* and *tree* data structures from the `priorityQ.java` and `tree.java` programs. Your program should do the following:

- 1) Accept a text message, possibly of more than one line
- 2) Create a Huffman tree for this message
- 3) Create a code table
- 4) Encode the message into binary
- 5) Decode the message from binary back to text

If the message is short, the program should be able to display the Huffman tree after creating it. You can assume there are only letters, carriage returns and line feeds in the message. You can use `String` variables to store binary numbers as arrangements of the characters 1 and 0. Don't worry about doing actual bit manipulation unless you really want to.