

Question:

I was able to encode the file and get the encoded string correctly. I cannot seem to decode the tree in the right order, would you be able to lead me into the right direction?

Answer:

For decoding you shall use the same Huffman Tree that you created for coding. You start with root, read from encoded sequence 1 character (0 or 1), if it is 1, you move in your tree to the right, if it is 0, you move to the left, check if you are in leaf now, if you are in leaf, get the character saved in the leaf, if it is not a leaf, continue reading (0 or 1) from the sequence until you reach a leaf. When you reach the leaf, start from the tree root again, continue reading 0 or 1 from the sequence until the sequence exhausted and no more 0s or 1s are in the sequence. It must be consistent since you created Huffman tree for encoding and use the same Huffman tree for decoding.