1. Are you using min-heap in your implementation?

Yes, min-heap is used in the implementation.

2. What is the size of the compressed file after compressing the sample input file provided with the assignment?

Size of the compressed file is 24K

3. Describe the format of the metadata that is stored in the compressed file.

The metadata for Huffman codes contains each character followed by "->", which is followed by its Huffman code. For example, for the given sample input file following metadata is generated:

a -> 0

c -> 1 0 0

b -> 1 0 1

f -> 1 1 0 0

e -> 1 1 0 1

d -> 1 1 1

The compressed file stores the metadata for Huffman codes followed by the encoded sequence.