

1. Huffman compression will result in a significantly reduced size with files that have a lot of repeated characters. A file with mostly unique characters will have much less reduction.
2. Huffman repeatedly merges the two smallest-weight trees to ensure that the more infrequent characters have a lower priority in the priority queue.
3. Huffman compression does lossless compression. This is because no data is lost at all during compression and decompression, resulting in the exact file.
4. How many hours did you spend on this assignment?  
About 6 hours were spent on this.