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CS 2420

## Assignment 12: Analysis

- 1. I don't have much experience with FileReader so I couldn't do the tests or the experiment. I also didn't give myself enough time so I didn't make it in time. I'm working on it though.
- 2. For files with a large amount of characters, there is going to be a more significantly reduced number of bits in the compressed file. For files with few elements or files with few elements and high ASCII values, there is going to be little or no savings.
- 3. Huffman's algorithm repeatedly merges the two smallest-weight trees rather than the two largest-weight trees so that the elements that appear a large number of times can be represented by fewer bits.
- 4. Huffman's algorithm performs lossless compression because all of the information that we stored in the file is still stored in the compressed file, but in bit code. The file can also be reconstructed with the header information and no data is lost or deleted.
- 5. I spent around 3 hours on this assignment.