

Huffman coding. Implement Huffman coding as explained in class and described in the Subject notes. This assumes that you will also provide an implementation of a BinaryHeap (aka array with the required Heap properties) with operations as described in class. Implementation must work with arbitrary files binary or not. We will test it minimally on a text file, PDF, and JPG or MPEG. Argument filename in the command-line below is an arbitrary file-name. It can be p1610s18.pdf, or p1610s18.tex, or image1.jpg, or say 01aug25 flare.mpg, or something else. The suffix (sometimes called the extension) is what follows the dot (eg pdf, tex, jpg, mpg). Although we do not ask for your implementation to be optimal and fast we require that it is relatively efficient. Thus Huffman coding (encoding or decoding) of a 2MiB file should not take more than 15-30 seconds in Java, C, or C++ on an AFS machine with reasonable load. Moreover your implementation should result in some compression savings for reasonable test files (though do not expect any in small text files or jpg files).