

Problem 9

- a) $C = \text{AMMVAPAM\$}$
- b) $S = \text{CTHULHUHU\$}$
- c) The encoded info that be produced by Burrows-Wheeler transform will have the same size and have the same alphabet compared to the source text. But it have many runs of the same character. This is easy for other algorithms to do the compression with a better performance. For example, in the bzip2, if we input the text which is produced by the Burrows-Wheeler transform to a move-to-front transformer, the output has long runs of zeros. At this time, when we applying modified RLE on this, this will have a really good performance.