

MMS Assignment – 1

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How to run for compression:

1. After unzip, there is text file named “bwt_input.txt”, copy your text that you want test into this file or paste your file here with name “bwt_input.txt”, dont forget to remove old file.
2. run there is main.sh shell file in it run this shell script using the command “./main.sh”
3. The compressed output is present in the “output.txt” file.
4. You can compare the sizes of “bwt_input.txt” and “output.txt” file.
5. “output.txt” file is reduced compared to “bwt_input.txt” file.

If you want to check every step output seperately: This is the flow

bwt_input.txt->temp_bwt_output.txt->temp_dbr_output.txt->temp_vbr_output.txt->temp_rle_output.txt->temp_huff_output.txt

you can check these files according to each step mentioned in the paper.

How to run for decompression:

1. go to decompress folder
2. run shell script named run_decoders.sh

Some Statistics:(these are default contents present in the folder)

bwt_input.txt(inputfile)--->size (9774 bytes)

output.txt(after compression_outputfile)-->size(1668)

Compresson Ratio:

$9774 / 1345 = 7.27$

Improvement percentage:

$(9774 - 1345) / 9774 * 100 = \boxed{\approx 87\%}$

A bit extension for image and .exe files:

There is compression for .jpg image file and .exe file, but changing those contents to text file itself taking much time.