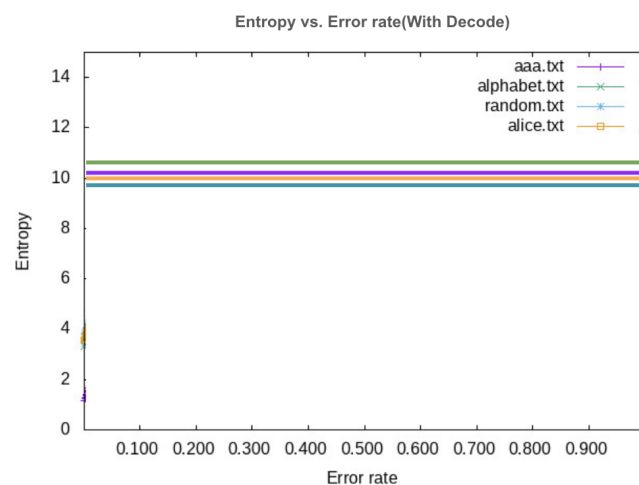
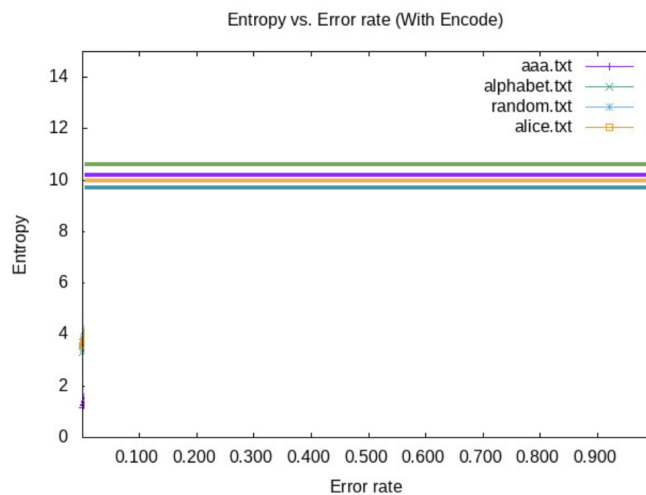


Writeup - Asgn 5 - Hamming Codes

Lab Description:

This program acts as a linear error-correcting code in order to correct errors caused by punch card readers. This assignment contains 3 codes, hamming.c, bv.c, and bm.c. The generator.c and encoder.c use these files to print out an output file concerning this information. Calculating the parity bits one-by-one can append them to the message can provide one solution to creating a Hamming code for a message. Decoding this code can help to identify these errors and recover the message when and if an error is found.

Graphs:



Graph Analysis:

Based on the graphs we created we can see that compared to the reference code, the code that I created does have inconsistencies. These differences can be linked to the way in which the values are taken in from the input file and masked accordingly, and how the decoder translates that information. Since the way in which the information is encoded is not completely right, the decoder results in a messed up output as well, which explains these inconsistencies.