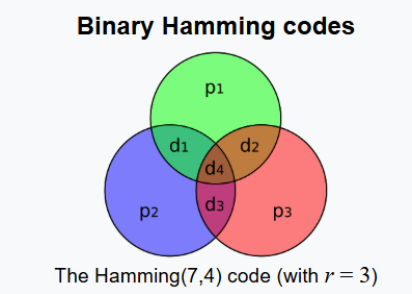
ENR 325 Assignment #3

Due: 9/19/25 10:00 pm

Task 1:

Check the Wikipedia page of Hamming code. It gave an example of Hamming (7,4).



Graphic representation of the Hamming (7,4) code with four data bits (d1, d2, d3, d4) and three parity bits (p1, p2, p3). The membership of each data bit shows which parity bits cover said data bit. For example, d3 is covered by p2 and p3, but not p1.

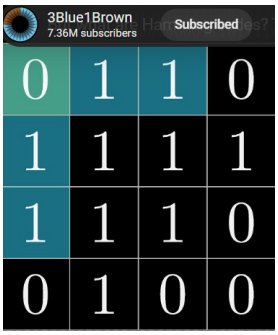
We spent a lot of our time on Hamming (15, 11). So now please provide a similar Graphic representation of Hamming (15, 11).

AI might help, but try to work it out on your own first.

Show your graphics in a slide.

Task2:

The 3Blue1Brown video presentation for Hamming (15,11) is, imo, very nice.



Please provide a similar matrix graph for Hamming (7,4).

Again, AI might help, but try to work it out on your own first.

Show your graphics in a slide.

Task3:

Log into: https://makecode.microbit.org/#, and make a Hamming encoder with the block coding/JS.

Once you are done, write a brief intro of how the program works in the slide, and then upload/email me the Hex file.