CS2700 Homework 2

Phillip Janowski (pajmc2@mail.umsl.edu)

October 24, 2018

Question 1.

5.10 For the Hamming code show in Figure 5.10, show what happens when a check bit rather than a data bit is in error ?

Position	12	11	10	9	8	7	6	5	4	3	2	1
Bits	D8	D7	D6	D5	C8	D4	D3	D2	C4	D1	C2	C1
Block	0	0	1	1	1	1	0	0	1	1	1	1
Codes			1010	1001		0111				0011		

Position	Code	Result
Hamming	1111	
10	1010	
9	1001	
7	0111	
3	0011	
XOR'd	1000	

It detects that there is an error in position 8.