Emily List
Homework #2

2-8

37) Hexadecimal → Binary

(a) $38_{16} = 0011\ 1000$

(b) $59_{16} = 0101\ 1001$

(c) $A14_{16} = 1010\ 0001\ 0100$

(d) $5C8_{16} = 0101\ 1100\ 1000$

(e) $4100_{16} = 0100\ 0001\ 0000\ 0000$

(f) $FB17_{16} = 1111\ 1011\ 0001\ 0111$

(g) $8A9D_{16} = 1000\ 1010\ 1001\ 1101$

39) Binary → Hexadecimal

(a) $1110 = E_{16}$

(b) $10 = 10_{16}$

(c) $10111 = 17_{16}$

(d) $1010\ 0110 = A6_{16}$

(e) $11111000 = 1F8_{16}$

(f) $1001\ 0000010 = 10082_{16}$

40) Decimal → Hexadecimal

(a) $8 = 8_{16}$

(b) $14 = E_{16}$

(c) $33 = A2_{16}$

(d) $52 = 43_{16}$

(e) $284 = C11_{16}$

(f) $2890 = A4B_{16}$

(g) $4019 = 3BF_{16}$

(h) $6500 = 4691_{16}$

2-10

50) BCD → Decimal

(a) $0001 → 1$

(b) $0110 → 6$

(c) $1001 → 9$

(d) $0001\ 1000 → 18$

(e) $0001\ 1001 → 19$

(f) $0011\ 0010 → 32$

(h) $10011\ 000 → 98$

(i) $1000\ 0110000 → 870$

2-11

56) Binary → Gray Code

(a) $11011 → 10110$

(b) $1001010 → 110111$

(c) $111101110110 → 100011001001$

57) Gray Code → Binary

(a) $1010 → 1100$

(b) $00010 → 0\ 0011$

(c) $1100001001 → 1000001110$

60) Hello. How are you?

2-12

63) Determine which even parity codes is in error.

(a) $100\ 1100010 → 4$ 1's ✓

(b) $0111\ 01010 →$ error: 5 1's

(c) $10111101\ 0001010 → 10$ 1's ✓