Homework 1

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September 22, 2015

Problem 1

- a.i.) Convert 29 to binary: 00011101 Invert and add 1 11100011
- a.ii.) Convert E to binary: 00001010 Invert and add 1 11110010
- a.iii.) Convert 0136 to binary: 10100010 Invert and add 1 10100010
- a.iv.) Invert and add 1 110111110
- a.v.) Convert 0x74 to binary: 01110100Invert and add 1 10001100 + 00000001 = 10001100
- b.i.) 1 + 4 + 16 + 128 + 256 = 405
- b.ii.) Ignore leading ones -64 + 4 = -60
- b.iii.) Ignore leading ones -512 + 3 = -509

- b.iv.) Convert to hex first by grouping into fours 0000101001010011 = 0A53 10*256+5*16+3=2643
- b.v.) Ignore leading ones -2048 + 512 + 16 + 8 + 1 = -1511

Problem 2

- $a) \ a = b a; \\ b = c; \\ d = c * d; \\ c = d + a;$
- b) mov r11 #5 sub r11 r5 r11 add r7 r11 #6 mul r6 r11 r7
- ci) mov r11 #5 sub r11 r5 r11 add r7 r11 #6 mul r6 r11 r7
- cii) mov r11 #5 sub r11 r5 r11 add r7 r11 #6 mul r6 r11 r7

How the rest of the paragraph looks with no ident, also a problem with seveleral lines as well $\,$