COSC 221: Computer Organization I

Using LC-3 ML Operate instructions

1. Take the complement of the value stored in register 0 and store result in register 1: R1 = NOTR0*Opcode:* ; DR = R1; SR = R02. Add the decimal number -10 to register 2: R2 = R2 - 10 = R2 = R2 + (-10)Opcode = 0001; DR = R2; SR1 = R2; immed5 = -10 = 10110b2. Decrement the value stored in register 4: R4 --3. Add the contents of registers 3 & 4 and store the results in register 3: R3 = r3 + r4