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Ex1, Ex2: check a3q1.c, a3q2.s on owl

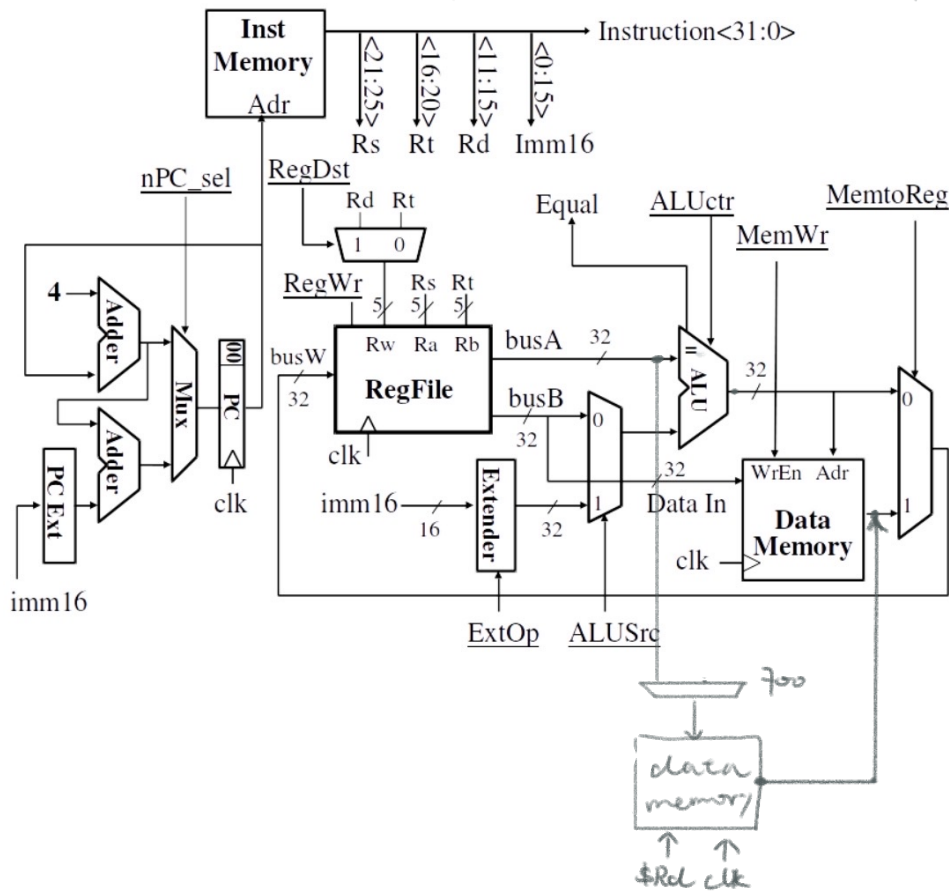
Exercise 3:

ALUctr MemWr MemtoReg ExtOp ALUSrc nPC\_sel RegDst RegWr

(a) slt 0 0 x 0 0 1 1  
 (b) bne 0 0 t1 0 1 x 0

Exercise 4:

(a) -



(b) :

1. Before ALU, a MUX is added to determine whether the instruction is "700" or not
2. If it is "700", then update the value in  $\text{Reg}[\$rt]$
3. Update the value in memory address  $\text{Reg}[\$rd]$ .
4. Increment PC value for next instruction.

(c) ALUctr MemWr MemtoReg ExtOp ALUSrc nPC\_sel RegDst RegWr 700  
 700 0 1 x 0 0 0 1 1