

single-cycle processor

programs

quadratic-s.s → quadratic-s-main.s

add a "main" function at the top

If needed adjust stack pointer

If needed put array on stack

call function with b1

Add end marker add r0,r0,#0

project04 -> quadratic-s-main.hex quadratic-s-main.s

↓

Instruction → ROM  
Memory

Lab 09

PC to ROM

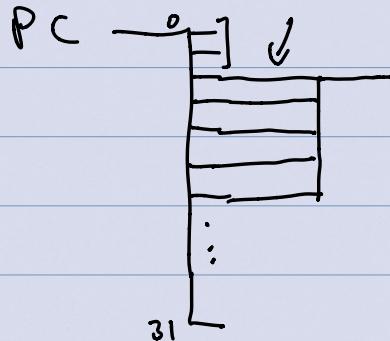
PC is a 32 bit byte address

ROM takes a word address

PC byte to word

PC / 4

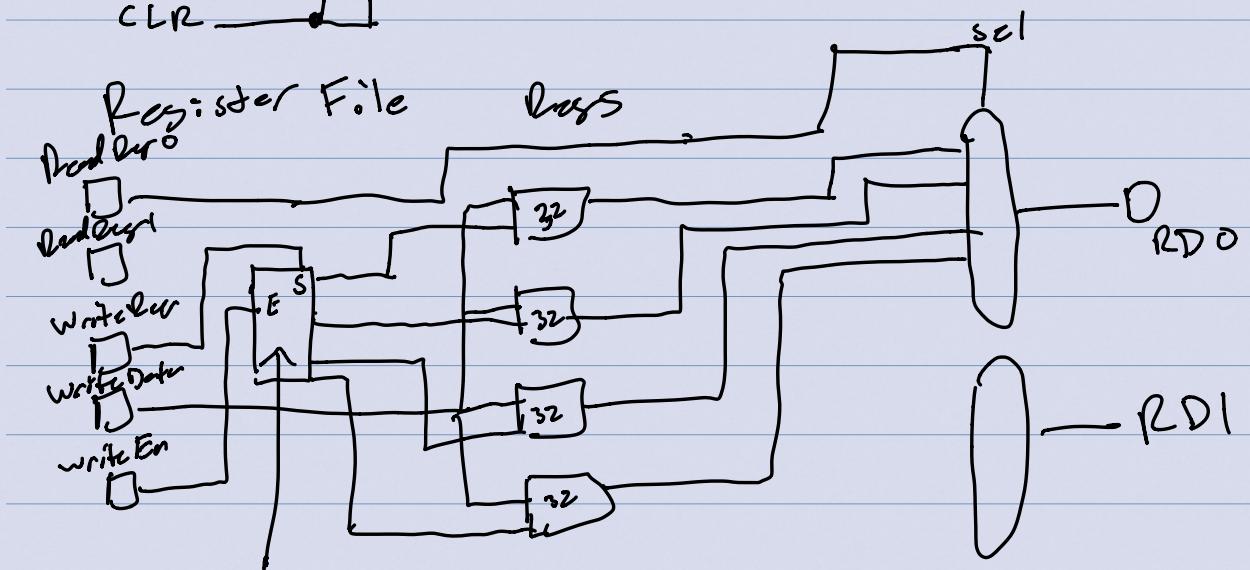
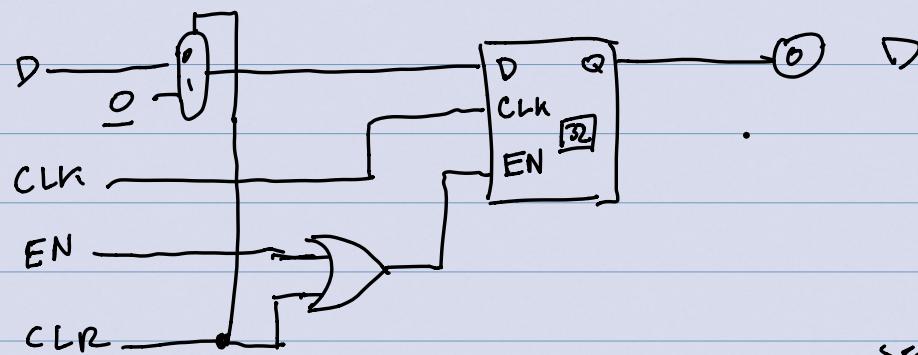
PC >> 2



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### Digital Register with CLR

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Digital Decoder with Enable

PC pass through

ALU

ALUOp

A

B

ALUOp

SD

+3

OR

ADD

SD3

MUL

~~Mov~~

LSJ

LSR

N  
Z  
C  
V

Mov r3, #99 → Write Data

# Register File

