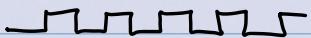
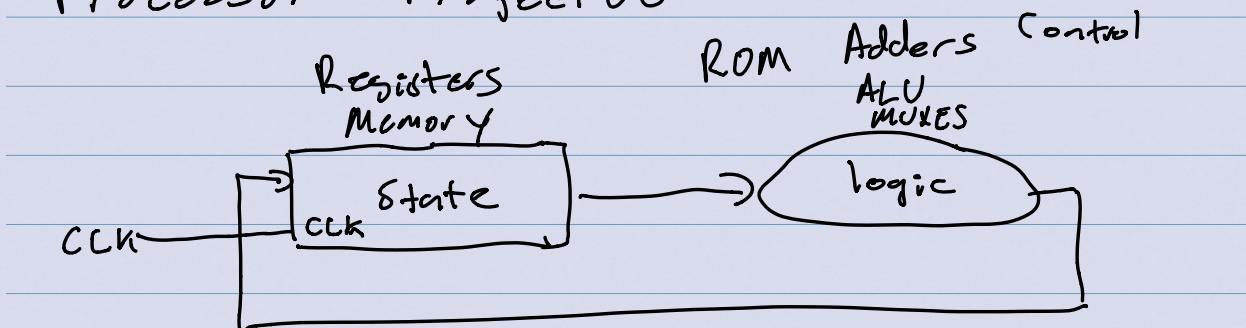


Processor Project 06



single-cycle processor

Test Programs

quadratic-s.s → quadratic-s-main.s

Add a main function at the top

If needed adjust the stack pointer (SP)

If needed put an array on the stack

call function with b1

add End marker add \$0, \$0, \$0

project04 - h quadratic-s-main.hex quadratic-s-main.s



Instructions → ROM

Memory

Lab 09

PC to ROM

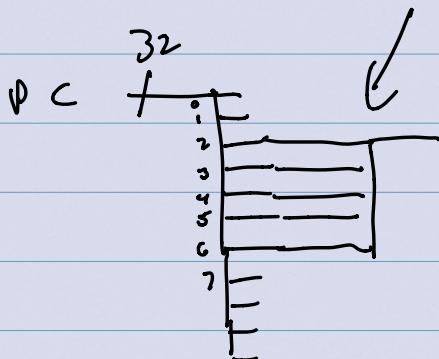
PC is a 32 bit byte address

ROM takes a word address

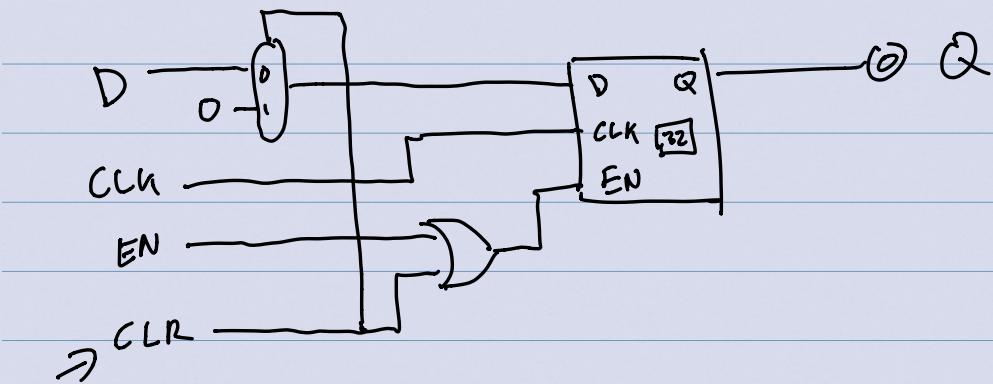
(limited in size < 32 bits)

PC / 4

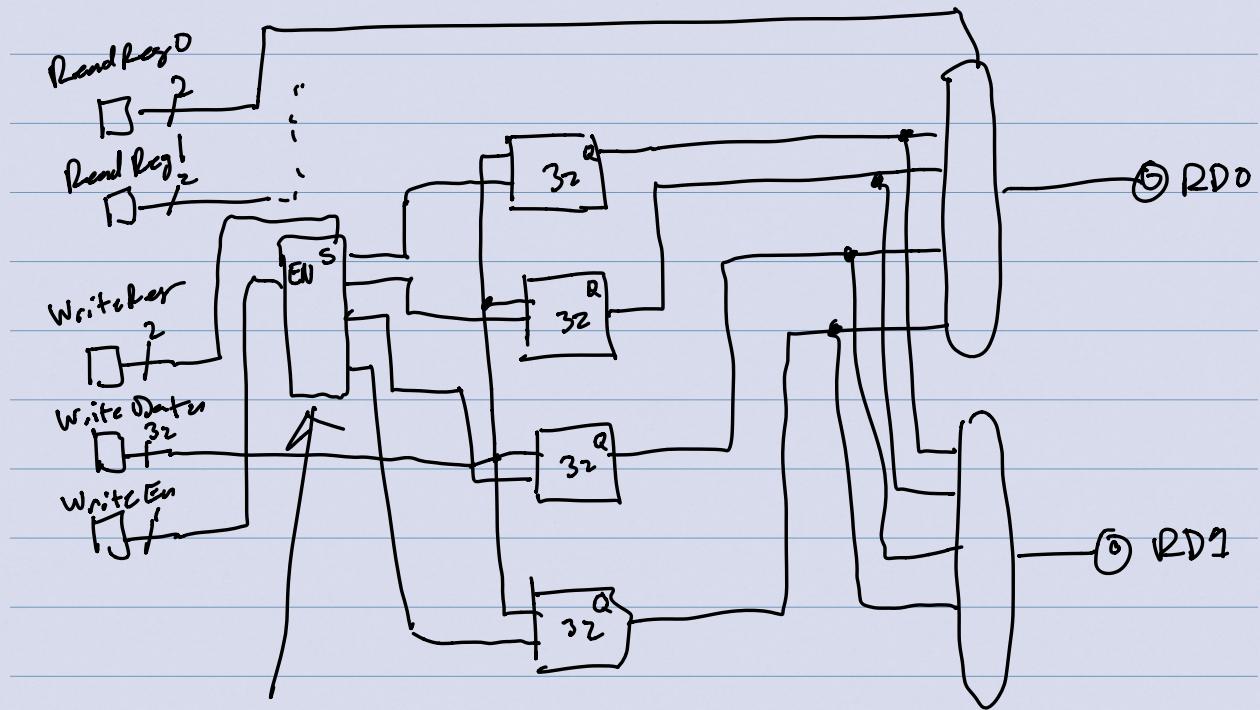
PC >> 2



Digital Register with CLR



Register File



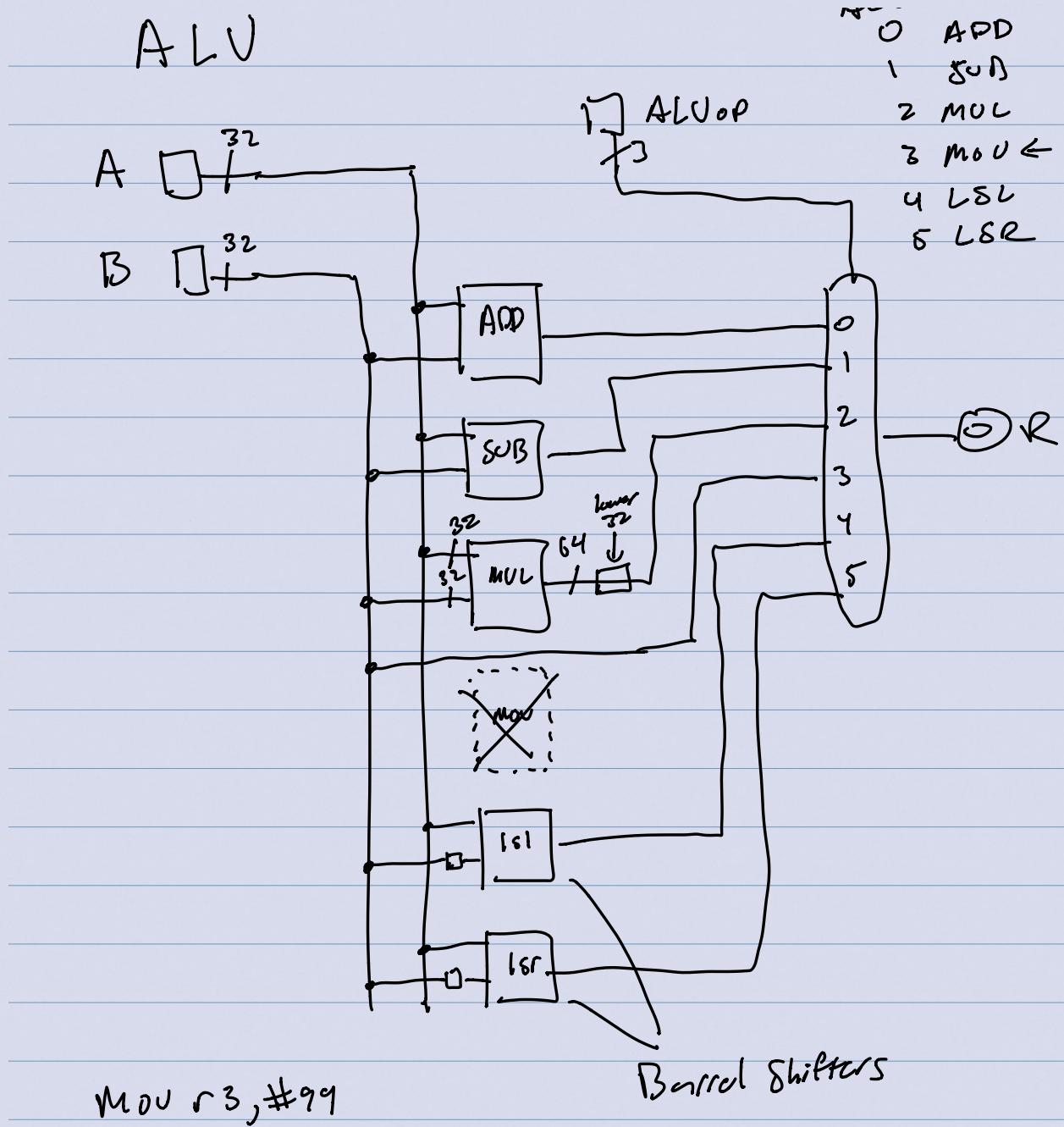
Digital Decoder with Enable

PC input passthrough to 16th input on Muxes.

MOV PC, R⁰

bx → MOV PC, R

ALU



Register File

