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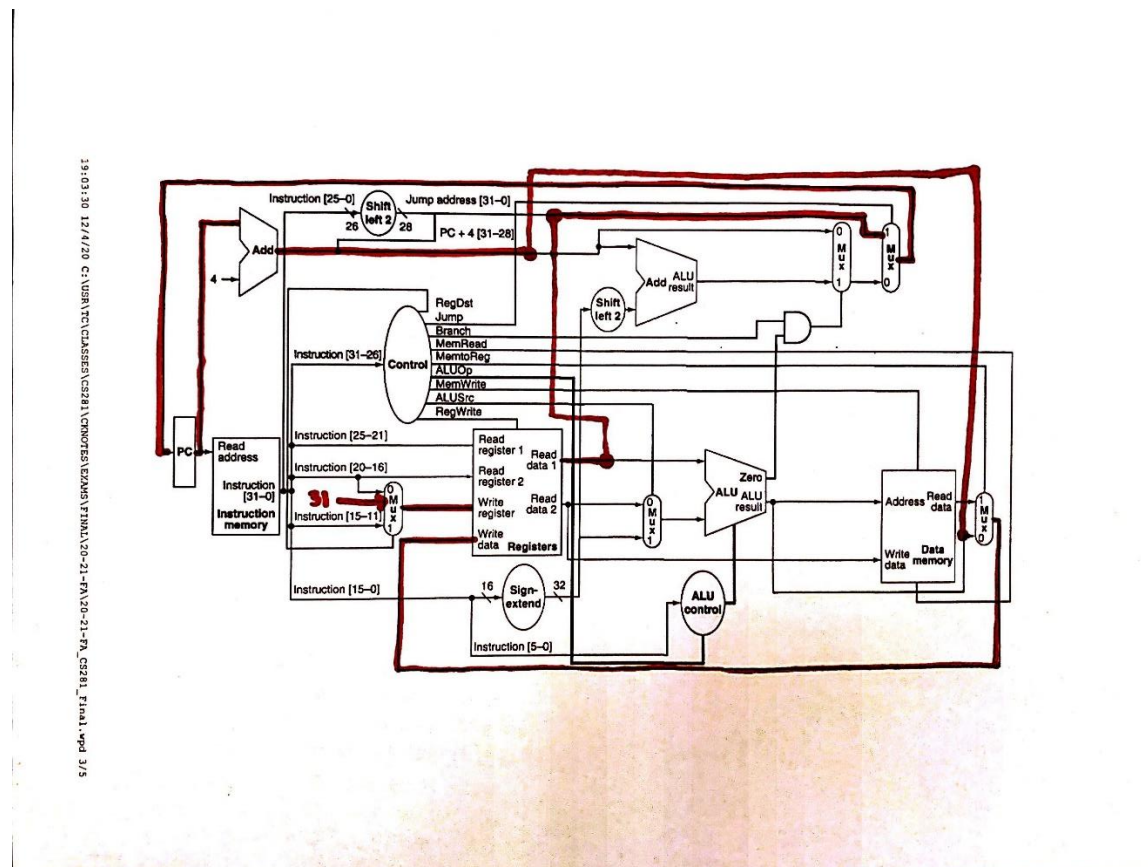
Prof. Katsinis

CS-281-B

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## Final Exam

### Problem 1:



I added 2 new control signals. One connects the Adder for PC to the Mux after the Data Memory. The other one connects Read Data 1 to the Mux that eventually leads back to PC.

Problem 2:

- 1) The lw instruction takes the current element in the array(s0) and, puts it into memory(mem(\$v0+0). The sw instruction takes the memory address of current element in the array(s0) and places it into a registry(v1).
- 2) We want to increment this before storing the address of p because we are editing the v0.
- 3)
- 4)