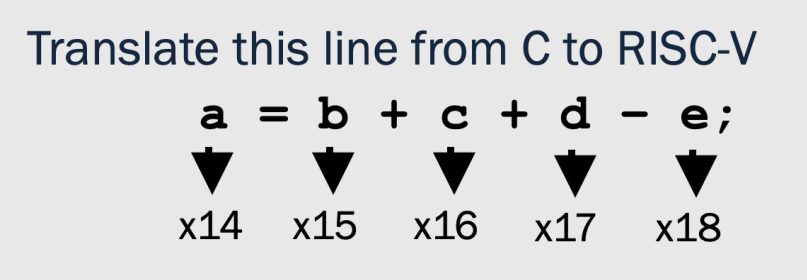
COMP311 In Class Practice 11-3-25 Name: _____

Question 1: C to RISC-V Translate the following C code snippet into RISC-V assembly language. You can you use additional registers in your solution.



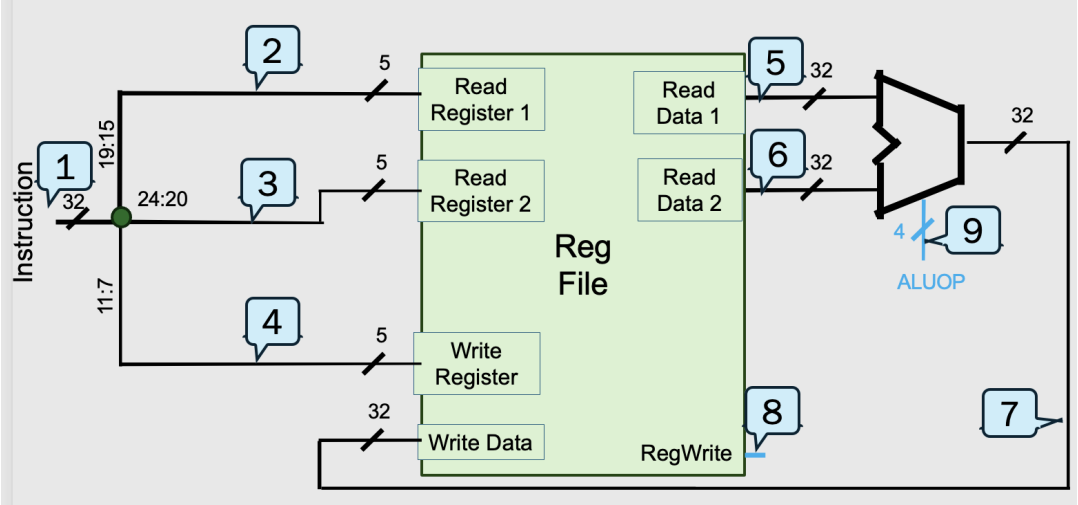
ALU control lines	Function
0000	AND
0001	OR
0010	add
0110	subtract
0111	set less than
1100	NOR

Question 2: Execution Tracing Given the RISC-V ALU Control table above, trace through the execution of the following RISC-V instruction, filling in the value of each signal. Provide all answers in decimal (except for #1). Use the original contents of the register file on slide 27 in lecture 20.

```
and x5, x6, x7
```

2.1. Signal 1

2.2. Signal 2



2.3. Signal 3

2.4. Signal 4

2.5. Signal 5

2.6. Signal 6

2.7. Signal 7

2.8. Signal 8

2.9. Signal 9