

Analysis of Logic Instructions

Question 1: (10 points)

(V06) Explain what the following sequence of RISC-V assembly does. This question is not asking you to explain what each individual instruction does. Rather, it asks you to follow the logic in the sequence and state, in an English statement, what is the effect of executing these instructions in the values stored in any register that is changed by the execution of the sequence.

```
addi    s0, zero, 1
slli    s0, s0, 31
srai    s0, s0, 15
srli    s0, s0, 8
xori    s0, s0, -1
and     s1, s0, s1
```