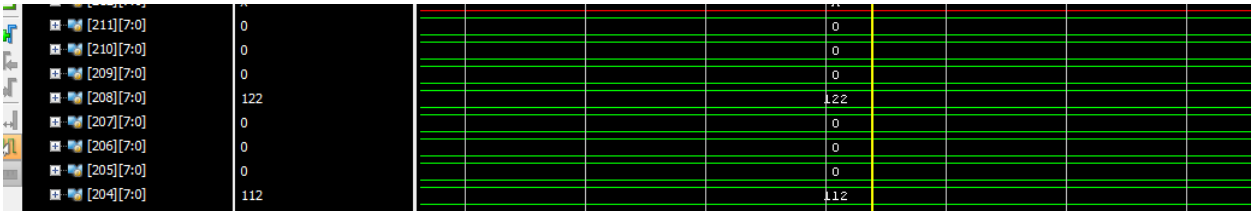
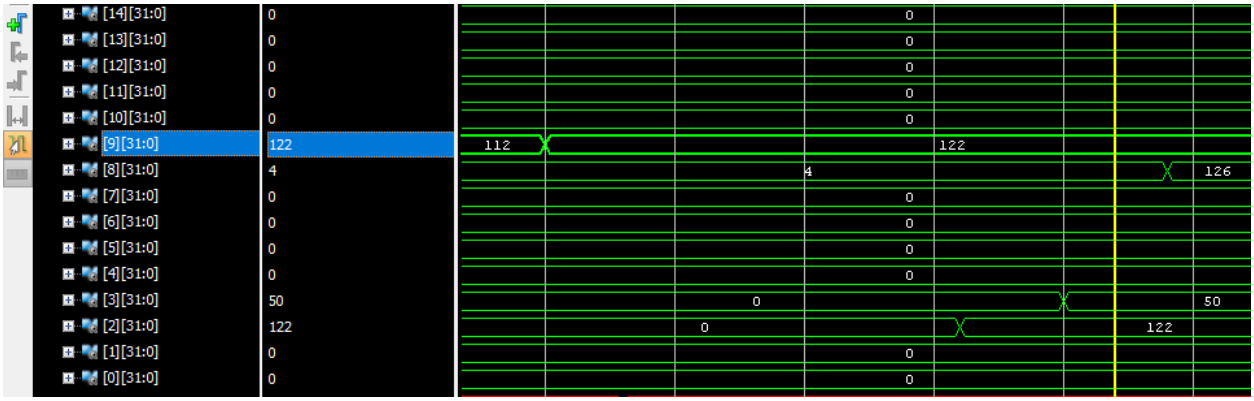
Instruction	Effect
c.li x8, 4	x8 = 4
c.lw x9, 0(x8)	x9 = 112
c.addi x9, 10	x9 = 122
c.sw x9, 4(x8)	mem[8] = 122
c.j 4	taken
c.addi x9, 10	skipped
c.mv x2, x9	x2 = 122
andi x3, x2, 55	x3 = 50
c. add x8, x8, x2	x8 = 126

Data Memory After Testing:



Register File After Testing:



Initialization Code:

```
initial begin
  {mem[3],mem[2],mem[1],mem[0]}=32'b0000000_00000_00000_000_00000_0110011;
  {mem[5],mem[4]}=  16'b010_0_01000_00100_01;   // li x8, 4 --> x8 = 4
  {mem[7],mem[6]}=  16'b010_000_000_00_001_00;  // lw x9, 0(x8) --> x9 = 112
  {mem[9],mem[8]}=  16'b000_0_01001_01010_01;  // ADDI x9, 10  --> x9 = 122
  {mem[11],mem[10]}=16'b110_000_000_10_001_00; // SW x9, 4(x8)  --> mem[8] = 122
  {mem[13],mem[12]}=16'b101_00000000100_01; //  j 4
  {mem[15],mem[14]}=16'b000_0_01001_01010_01; //  ADDI x9, 10  --> skipped
  {mem[17],mem[16]}=16'b100_0_00010_01001_10;  // mv x2, x9   --> x2 = 122
  {mem[21],mem[20],mem[19],mem[18]}=32'h03717193;  // (not comp) andi x3, x2, 55  --> x3
= 50
  {mem[23],mem[22]}=16'b100_1_01000_00010_10;              // add x8, x8, x2 --> x8 = 126
  {mem[7+200],mem[6+200],mem[5+200],mem[4+200]}=32'd112;
  end
```