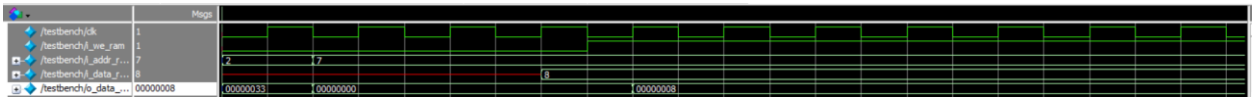
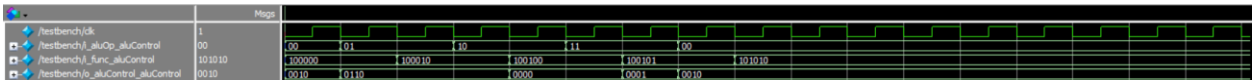


Adder.v



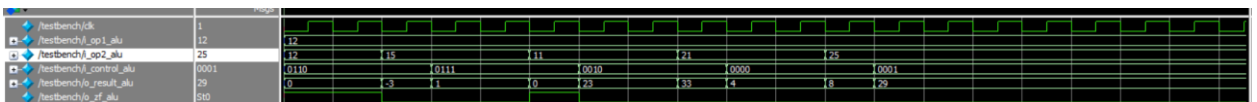
```
lab2_tb.v U  sim.do U  ram_mem.dat U X
ram_mem.dat
1 0
2 0
3 33
4 0
5 0
6 0
7 0
8 0
9 0
10 0
11 0
12 0
13 0
14 0
15 0
```

Ram.v

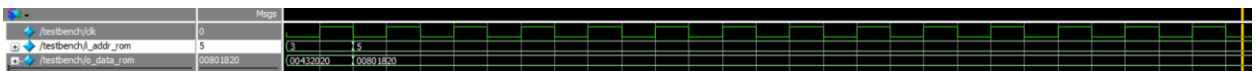


| ALUOp  |        | Funct field |    |    |    |    |    | Operation |
|--------|--------|-------------|----|----|----|----|----|-----------|
| ALUOp1 | ALUOp0 | F5          | F4 | F3 | F2 | F1 | F0 |           |
| 0      | 0      | X           | X  | X  | X  | X  | X  | 0010      |
| X      | 1      | X           | X  | X  | X  | X  | X  | 0110      |
| 1      | X      | X           | X  | 0  | 0  | 0  | 0  | 0010      |
| 1      | X      | X           | X  | 0  | 0  | 1  | 0  | 0110      |
| 1      | X      | X           | X  | 0  | 1  | 0  | 0  | 0000      |
| 1      | X      | X           | X  | 0  | 1  | 0  | 1  | 0001      |
| 1      | X      | X           | X  | 1  | 0  | 1  | 0  | 0111      |

aluControl.v



Alu.v



```
lab2_tb.v U  sim.do U  rom_init.dat U X
rom_init.dat
1 20020000
2 20030001
3 20050015
4 00432020
5 00601020
6 00801820
7 10850003
8 00000000
9 1000fffa
10 00000000
11 ac400007
12 1000ffff
13 00000000
```

Rom.v