

Answer Sheet for Lab 3

Part 1

a) _____0_____

b) _____1_____

c) _____1_____

d) _____0_____

Part 2

a) _____48_____

b) _____3.3 V_____

Part 3

Attach screenshot here (or submit as a separate file)

NEXT PAGE

```
Lab3 > Start.v
1 module Start(a, b, c, d, x);
2     input a, b, c, d;
3     output x;
4     assign x = (~a & b & ~c & d) | (a & ~b & c & d) | ((a & b & ~c & d));
5
6
7
8 endmodule
```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE

```
Cases-MacBook-Pro-9:Lab3 case$ iverilog tb_Start.v Start.v
Cases-MacBook-Pro-9:Lab3 case$ vvp a.out > out.txt
Cases-MacBook-Pro-9:Lab3 case$ vvp a.out
Starting simulation.....
Case Chrisbacher
Cases-MacBook-Pro-9:Lab3 case$
```

Part 4

Does your design work on your board?

Yes, it does! The three combinations that turned on the far-right LED were:

- $(\sim a) * (b) * (\sim c) * (d)$
- $(a) * (b) * (\sim c) * (d)$

- $(a) * (\sim b) * (c) * (d)$