

DAY-22

#100DAYSOFRTL

PROBLEM STATEMENT:--

1. Create a full adder. A full adder adds three bits (including carry-in) and produces a sum and carry-out.

Write your solution here

[Load a previous submission]

```
1 module top_module(  
2     input a, b, cin,  
3     output cout, sum );  
4  
5     assign sum=a^b^cin;  
6     assign cout=(a&b)|(b&cin)|(cin &a);  
7  
8 endmodule  
9
```

[Upload a source file...](#)

Status: Success!

You have solved 56 problems. [See my progress...](#)

Timing diagrams for selected test cases

These are timing diagrams from some of the test cases we used. They may help you debug your circuit. The diagrams show inputs to the circuit, outputs from your circuit, and the expected reference outputs. The "Mismatch" trace shows which cycles your outputs don't match the reference outputs (0 = correct, 1 = incorrect).

