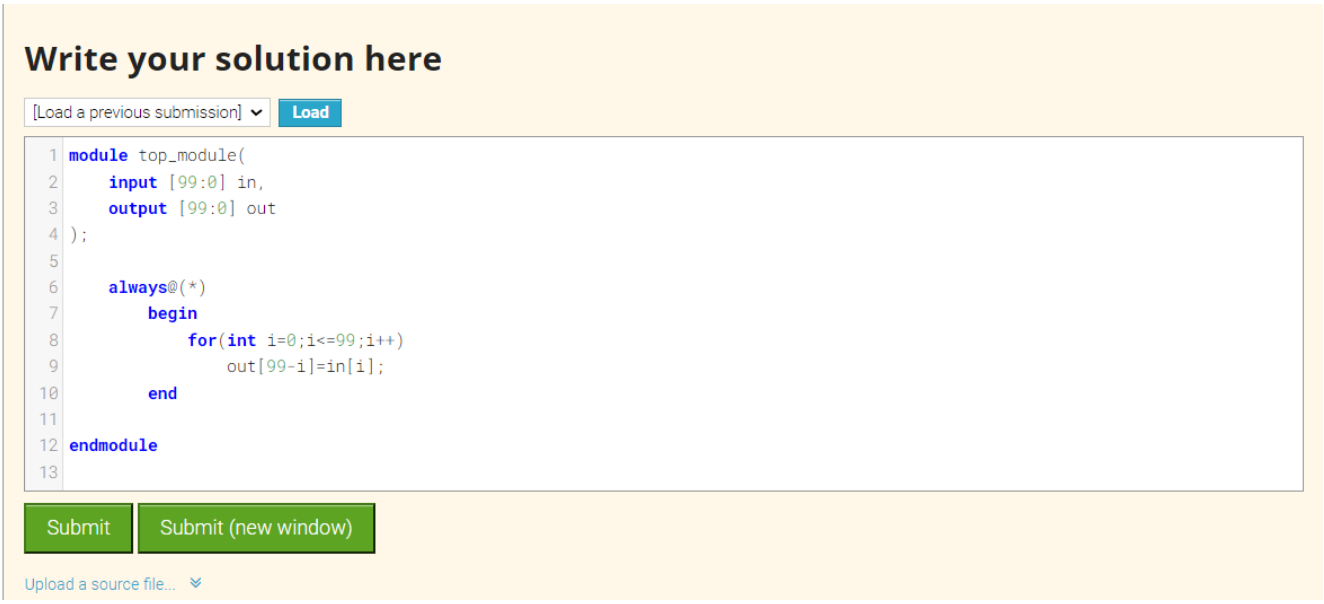
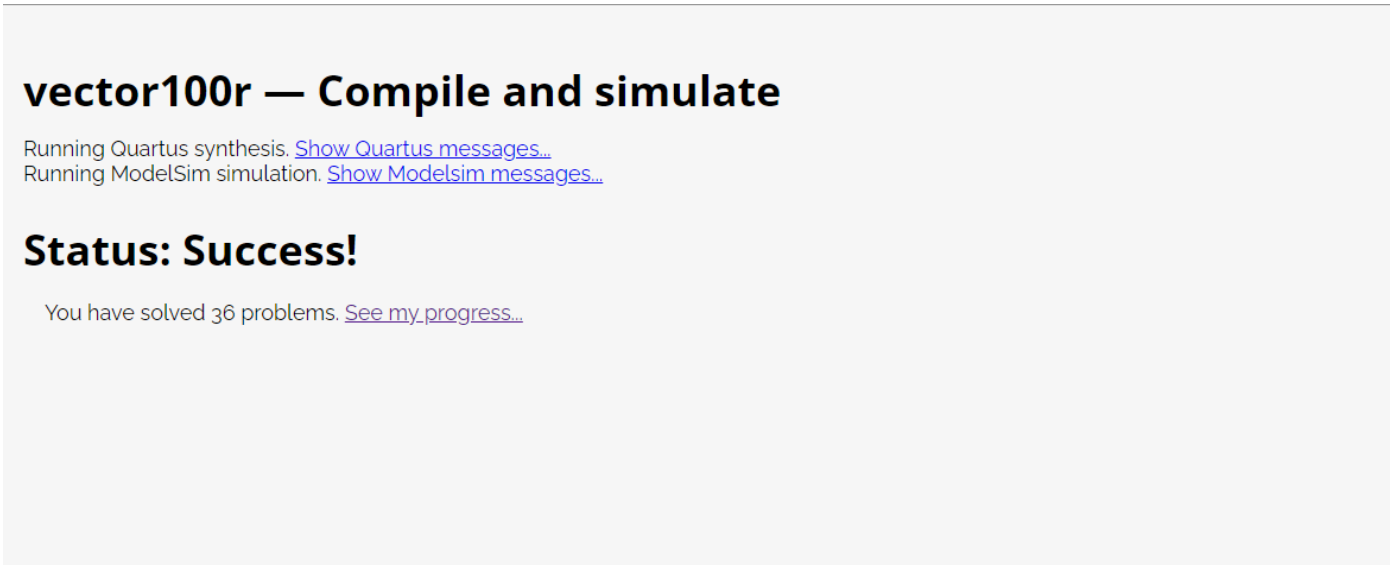
DAY-8
#100DAYSOFRTL

Problem statement :-

1. Given a 100-bit input vector [99:0], reverse its bit ordering.





2. A "population count" circuit counts the number of '1's in an input vector. Build a population count circuit for a 255-bit input vector.

Write your solution here

Last non-success: 2/27/2024, 8:44:55 AM Load

```
module top_module(
    input [254:0] in,
    output [7:0] out );

    always@(*)begin

    out=8'b00000000;
        for (int i=0 ; i<=254 ;i=i+1)begin

                if(in[i]==1'b1)
                    out=out+1;

                else
                    out=out;

            end
        end
endmodule

```

Submit Submit (new window)

Upload a source file...

popcount255 — Compile and simulate

Running Quartus synthesis. Show Quartus messages...
Running ModelSim simulation. Show Modelsim messages...

Status: Success!

You have solved 37 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).