not including current input.

any order, not necessarily consecutively (have been seen,

outputs a true once at least two 0's and at least two 1's (in

Draw the state diagram of a machine that continuously

Review Problem 29
Traffic Light Controller (cont.)

Note: Only using TRUE outputs
States?

If user guesses 8 patterns in a row, they’re psychic

Machine generates pattern off values (on or off)

PsychicTester:

Some problems best solved with multiple pieces

Subdividing FSMs
(Cont.)

Subdividing FSMs (cont.)
then do all assignments simultaneously.

Non-Blocking First Eval all Righthand sides,

Blocking assign immediately

=> V.S. = ☐
Each variable written in only one always block

NEVER mix in one always block!

Always: "always @(posedge clk)"

Sequential: always begin

Assign in combinational logic: always_comb assign

end case (ps)
always_comb begin
// Next State logic
end

always_comb begin
// Output logic
end

endcase
else
ps = us;
else
ps = A;
if (reset) always @(posedge clk) begin
// Sequential logic
end

ps => us;
else
ps => A;

if (reset)

end

\[ A \]