Xilinx ISE Lab 2\_Boolean Function

**Part I: Replace the following section in the tutorial by using the given code**

// Initialize Inputs

integeri=0;

initial begin

C = 0;

B = 0;

A = 0;

#10 $display ("starting test");

for (i=0; i<8; i=i+1)

begin

{A, B, C} = i;

#10 $display ("A B C =%b%b%b, {F} = %b", A, B, C, F);

end

end

initial begin

**// test case 0**

A = 0;B = 0;C = 0;

#10;// Wait 10 time units

**// test case 1**

A = 0;

B = 0;

C = 1;

#10;// Wait 10 time units

//Continue all the rest of test cases!!!

// test case 7

A = 1;

B = 1;

C = 1;

#10;// Wait 10 time units

$stop;

end

\*\*\* add the above modified code and simulation waveforms into the report

**Part 2: Very an XOR gate by following the tutorial**

**Things need to be added into the report:**

* XOR gate truth table
* Schematic
* Verilog code for the test bench

initial begin

**// test case 0**

A = 0;

B = 0;

#10;// Wait 10 time units

**// test case 1**

A = 0;

B = 1;

#10;// Wait 10 time units

//Continue all the rest of test cases!!!

#10;// Wait 10 time units

$stop;

end

* Simulation results showing all four CORRECT combinations