**Execution steps:**

**Program 1.**

Execute the files simple\_circuit.v and circuit1\_tb.v as mentioned below

Step1) iverilog -o test simple\_circuit.v simple\_circuit\_tb.v

If the compilation went OK, you won't see any output.

What this does is create a file called test1 that we can feed to the simulator.

Step2) vvp test

You can observe output on the console

Step3) gtkwave simple.vcd

Output waveform will be observed.

**Program 2.**

Execute the files circuit1.v and circuit1\_tb.v as mentioned below

Step1) iverilog -o test1 circuit1.v and circuit1\_tb.v

If the compilation went OK, you won't see any output.

What this does is create a file called test1 that we can feed to the simulator.

Step2) vvp test1

You can observe output on the console

Step3) gtkwave circuit1.vcd

Output waveform will be observed.

**Program 3.**

Execute the files circuit2.v and circuit2\_tb.v as mentioned below

Step1) iverilog -o test2 circuit2.v and circuit2\_tb.v

If the compilation went OK, you won't see any output.

What this does is create a file called   test2 that we can feed to the

simulator.

Step2) vvp test2

You can observe output on the console

Step3) gtkwave circuit2.vcd

Output waveform will be observed

Video Links for installation

1. ICARUS VERILOG FOR WINDOWS

<https://www.youtube.com/watch?v=jNhvCRTMU-8>

1. GTKWAVE ON WINDOWS

https://www.youtube.com/watch?v=OdmXrtvLrg0

<https://www.youtube.com/watch?v=TY3-0d6o7xo>

1. ICARUS VERILOG FOR UBUNTU

<https://www.youtube.com/watch?v=fDUgVFfPfno>

1. GTKWAVE ON UBUNTU

<https://www.youtube.com/watch?v=KlteeEE4ljs>

1. HELLO WORLD ON ICARUS VERILOG

<https://www.youtube.com/watch?v=xd-ZvBJiv3M>