Installation of Icarus Verilog and GTKWave

- **Install the tools according to your environment:**

  - **Windows 10/8/7**
    - Icarus Verilog and GTKWave
      - Download page: http://bleyer.org/icarus/
        - 64bit: iverilog-10.1.1-x64_setup.exe [9.77MB]
        - 32bit: iverilog-10.0-x86_setup.exe [11.1MB]
        - Install with administrator

  - **Ubuntu 18.04**
    - Icarus Verilog and GTKWave
      - sudo apt-get install verilog gtkwave

  - **macOS**
    - Icarus Verilog
      - brew install icarus-verilog
      - Note: brew(Homebrew) install refer to https://docs.brew.sh/Installation

    - GTKWave
      - Only GUI
        - Download page: http://gtkwave.sourceforge.net/
        - Download link: http://gtkwave.sourceforge.net/gtkwave-3.3.99.tar.gz

      - Use GTKWave on the command line
        - sudo port -v install gtkwave
        - Note: port(MacPorts) install refer to https://www.macports.org/install.php
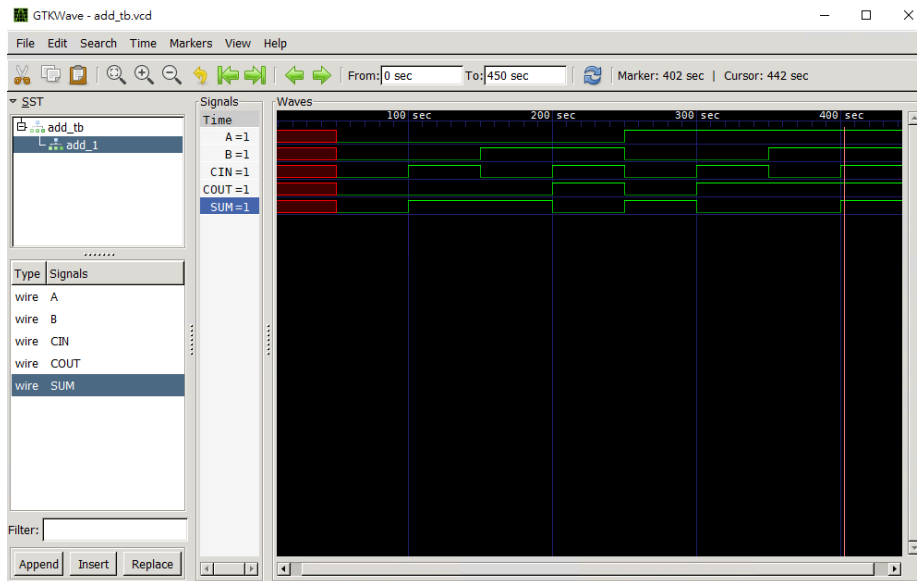
- **Verify your installation:**
  - Files:
    - add.v
    - add_tb.v
  - Command:
    - iverilog –o add_tb.vvp add_tb.v add.v
    - vvp add_tb.vvp
    - gtkwave add_tb.vcd

Computer Organization, Spring 2019

- **More installed information refer to
  https://iverilog.fandom.com/wiki/Installation_Guide**