

D:\verilog\Week2\nand\inv.v - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

nand.v x nand_tb.v x and.v x inv.v x

```
1 module inv(a,z);
2   input a;
3   output z;
4
5   assign z = ~a;
6 endmodule
```

Verilog file length : 74 lines : 6 Ln : 1 Col : 1 Pos : 1 Windows (CR LF) UTF-8 INS

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nand.v x nand_tb.v x and.v x inv.v x

```
1 module and1(a,b,z);
2   input a;
3   input b;
4   output z;
5
6   assign z = a&b;
7 endmodule
```

Verilog file length : 90 lines : 7 Ln : 1 Col : 1 Pos : 1 Windows (CR LF) UTF-8 INS

D:\verilog\Week2\nand\nand.v - Notepad++

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nand.v x nand_tb.v x and.v x inv.v x

```
1 module nand1(in1,in2,out1);
2     input in1;
3     input in2;
4     output out1;
5
6     and1 a1(in1,in2,z);
7     inv a2(z,out1);
8 endmodule
```

Verilog file length : 128 lines : 8 Ln : 1 Col : 1 Pos : 1 Windows (CR LF) UTF-8 INS

D:\verilog\Week2\nand\nand_tb.v - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

nand.v x nand_tb.v x and.v x inv.v x

```
1 `timescale 1ns/1ns
2 module nand_tb();
3     reg a;
4     reg b;
5     wire out1;
6
7     nand1 n1(a,b,out1);
8
9     initial begin
10         a = 0;
11         b = 0;
12         #100 $finish;
13     end
14
15     always begin
16         #1 a = ~a;
17         #1 b = ~b;
18     end
19
20     initial begin
21         $display("Hello World");
22         $dumpfile("output.vcd");
23         $dumpvars(0);
24     end
25 endmodule
```

Verilog file length : 334 lines : 25 Ln : 1 Col : 1 Pos : 1 Windows (CR LF) UTF-8 INS

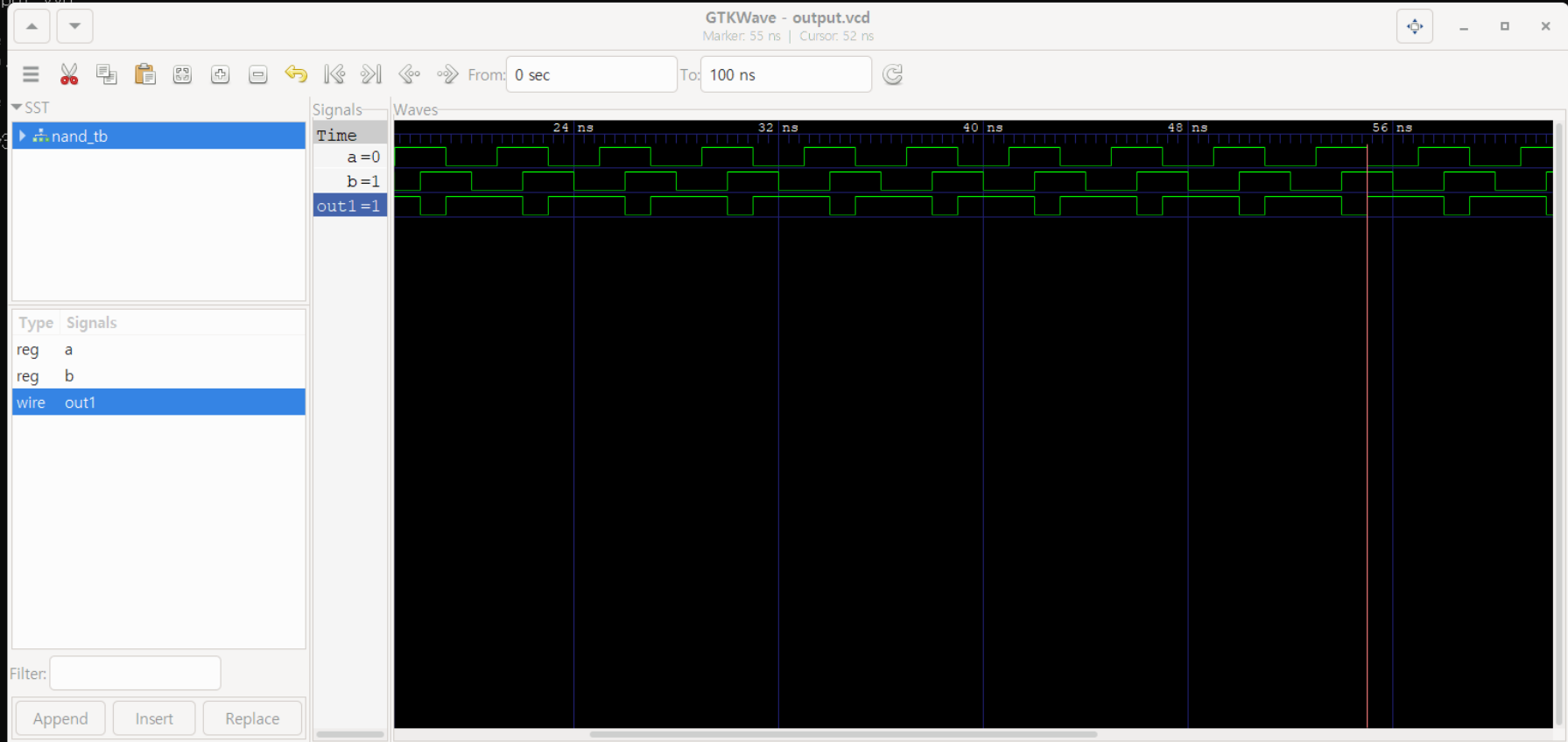
output.vcd

le

tb.

ve

v3



```
선택 명령 프롬프트 - run.bat
D:\#verilog>run.bat
D:\#verilog>del output*
D:\#verilog>iverilog -o output.vvp Week2/nand/*.v
D:\#verilog>vvp output.vvp
Hello World
VCD info: dumpfile output.vcd opened for output.
Week2/nand/nand_tb.v:12: $finish called at 100 (1ns)
D:\#verilog>gtkwave output.vcd
GTKWave Analyzer v3.3.108 (w)1999-2020 BSI
[0] start time.
[100] end time.
```