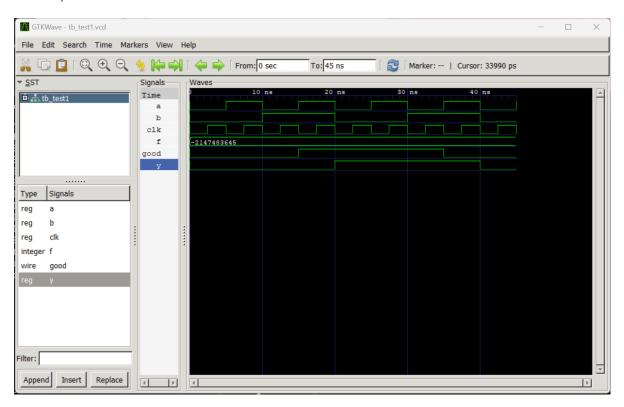
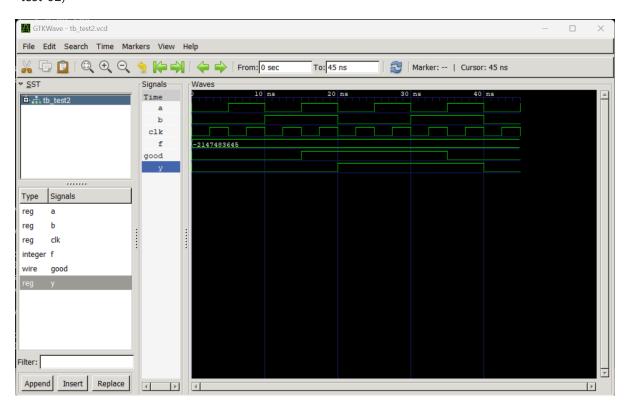
2022100124 권서은 DIGITAL LOGIC DESIGN-01 LAB #02

a)

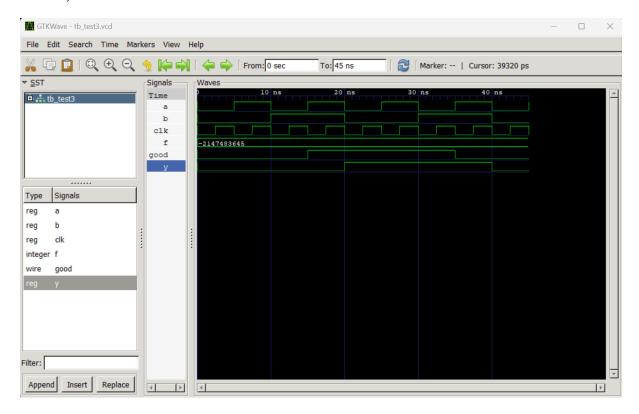
-test 01)



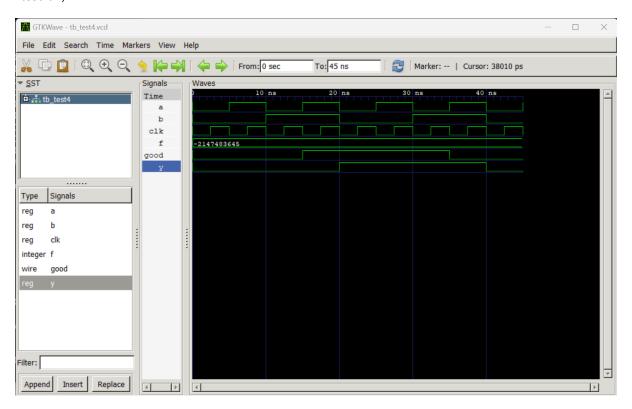
-test 02)



-test 03)



-test 04)



b)

The name of the logic gate in the BLACKBOX module in the report document is NAND gate.

The output Good will become '1' if the logic gate works correctly.

That means if the input A is 0 and B is 0, the output Y is 1. When A is 0 and B is 1, the output Y is 1. When A is 1 and B is 1, the output Y is 1. When A is 1 and B is 0, the output Y is 1.

As we can see, the output signal Y is 0 only when both inputs are 1. For all other input combination, the output signal Y is 1. That is the NAND gate, since the output of a NAND gate is 1 when there is at least one 0 input.

So the name of the logic gate in the BLACKBOX module in the report document is NAND gate.