Changed eq2.v:

> Missing and op

> missing semicolon

> tried to create from module 3 instead of module 1

Changed eq2\_tb.v:

$display("time test\_in0 test\_in1 test\_out ") ;

$monitor("%d %b %b %b" ,

$time, test\_in0 , test\_in1 , test\_out);

to track changes to TB variables and show changes in sim window.

A screenshot of a computer

AI-generated content may be incorrect.

time test\_in0 test\_in1 test\_out

0 00 00 1

200 01 00 0

400 01 11 0

600 10 10 1

800 10 00 0

1000 11 11 1

1200 11 01 0

Output results match the expected comparator output.

Improvements: add exhaustive permutations of input and output.

A screenshot of a computer

AI-generated content may be incorrect.

A grid of numbers and symbols

AI-generated content may be incorrect.

Added agtb2.v:

module agtb2(

input wire[1:0] a, b, // a and b are the two 2-bit numbers to compare

output wire agtb // single bit output. Should be high if a and b the same

);

wire and1, and2, and3;

assign and1 = a[0] & ~b[0];

assign and2 = a[1] & ~b[0] & ~b[1];

assign and3 = a[0] & a[1] & ~b[1];

assign agtb = and1 + and2 + and3;

endmodule

**Test of 2 bit greater than:**

time test\_in0 test\_in1 test\_out

0 00 00 0

200 01 00 1

400 01 11 0

600 10 10 0

800 10 00 1

1000 11 11 0

1200 11 01 1

A screenshot of a computer program

AI-generated content may be incorrect.