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Assignment: Verilog lab 6 report

Graphical user interface, text, application

Description automatically generated

Comment: a == b a equal to b, result may be unknown (logical equality); value = 0 or 1 or X. if one of the bits in a or b are x or z it results with x so none of the condition resulted in 1 and no one of the if conditions executed resulted for the default to be executed.

2.

Text

Description automatically generated

Comment: a === b a equal to b, including x and z (Case equality); value = 0 or 1. Statement 3 has been selected because the condition is true. Statement 4 is selected because in triple equality x ===x and z===z results in 1. Since we are not breaking it out default will execute.

3.

Text

Description automatically generated

Comment: If a has x or z in conditional operation, then a = x instead of other values in assignment. assign Z=(X==Y)? 1'b1:1'b0; in this condition since x and y are 1’bx x==y will be x and the result of z will be 1’bx since the condition resulted in neither 1 nor 0.

4.

Graphical user interface, text, application

Description automatically generated

Comment: for the case statement the expression is x and the value of x is *X=4'b101x; and from the cases of x the second statement match it that’s why we get output of the second statement.*

5.

Background pattern

Description automatically generated with low confidence

Comment: For caseX Match: x = z and x/z = 0,1,x & z. and in this example X=4'b101x; matches with 4'b10xx that way statement 2 has been selected even though we have other true conditions after the first execution the case jump out.

6.

Graphical user interface, application

Description automatically generated

Comment: *Y=4'b101z;* *4'b???1 in this case x will be match with three of the cases but only the first match will be selected*

7.

Graphical user interface, application

Description automatically generated

Comment: In casez, ? = 0/1/x/z, z = 0,1,z and x = 0,1,x; x≠z as the result the default will be excuted

Example\_2

Graphical user interface, text, application, Word

Description automatically generated

X=4'b1x00; 4'b1???: $display("Statement 4 has been selected!"); will be excuted