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1. (20 pts) Working design submitted.
2. (10 pts) What is the first error identified in the video? Be explicit, identify the line number and explain.
   1. Syntax error. Missing semicolon on line 16 for me, line 33 in the video inside the max3sint16b.v file. Semicolon is used to indicate the end of a command, without this, the compiler cannot understand the instructions.
3. (10 pts) What is the second error identified in the video? Be explicit, identify the line number and explain.
   1. Synthesis error, no driver for variable “y”. Line 35 in the video, line 18 on my system. A variable that does not exist was used that caused errors.
4. (10 pts) What is the third error identified in the video? What is the first test vector that fails because of this error (warning: the test vectors that you have are different from what is in the video. Capture a screen shot of the simulation showing the vectors the fail, and explain why it fails. The vectors need to be formatted as signed decimal as shown in the video. Arrange the signals in the waveform viewer from top to bottom in the following order: a, b, u1\_lt, max\_ab, c, u2\_lt, y. The screenshot MUST have the yellow cursor over the failing vector.
   1. max\_ab -> [15:0] max\_ab. The variable max\_ab was not initialized as a 16 bit variable and could not hold the 16 bit value, so it only stored a 1 or a 0.
   2. Graphical user interface

      Description automatically generated
5. (10 pts) What is the fourth error identified in the video? What is the first test vector that fails because of this error (warning: the test vectors that you have are different from what is in the video. Capture a screen shot of the simulation showing the vectors the fail, and explain why it fails. The screenshot MUST have the yellow cursor over the failing vector.
   1. Vector 3 at 200-250 ns. Line 16 in max3sint16b.v has u2\_lt assigned to c < max\_ab when it should be max\_ab < c. This is in line with the diagram given for how the program should execute.
   2. Graphical user interface

      Description automatically generated
6. (10 pts) What is the fifth error identified in the video? What is the first test vector that fails because of this error (warning: the test vectors that you have are different from what is in the video. Capture a screen shot of the simulation showing the vectors the fail, and explain why it fails. The screenshot MUST have the yellow cursor over the failing vector.
   1. The vector max\_ab was not initialized as a signed variable, causing the numbers to be calculated incorrectly as the large negative values were seen as large positive values.
   2. Graphical user interface

      Description automatically generated
7. (15 pts) After correcting all errors, capture a screenshot showing the last vector that causes the message ‘All vectors passed’ to be printed (can capture this message in the screenshot as well).
   1. A picture containing scatter chart

      Description automatically generated
8. (15 pts) Run the implementation, then run the ‘Post Implementation Timing Simulation’. Capture a screenshot showing the message ‘All vectors passed’. In the screenshot, have the ‘uut’ selected in the ‘Scope’ tab, and have the screenshot include some of the signals from the ‘uut’ (there will be some signals named ‘…OBUF’ in here in addition to other signals).

