**Chapter 3, Procedural Statements and Routines homework**

The purpose of this homework is to practice using tasks, functions, and do-while loops by improving on your solution Chapter 2, Data Types homework 1 or homework 2. Expand on your solution by:

1. Adding a checker to the testbench that increments the error counter if write and read are both 1. Add a test to your testbench that tests the checker.
2. Calculating even parity in module my\_mem using a function. Pass the arguments to the parity function by name, not position.
3. Using a do-while loop at least once in your testbench.

Deliverables:

1. Code for my\_mem and testbench.
2. Waveform showing at a minimum the I/O of the memory model and the error counter.
3. Transcript window showing 0 memory errors and at least 1 read=1 & write=1 error.