**Pseudocode for Component Failure Analysis**

1. Define constants R1, R2, and NUMTRIALS (I did 5000 trials)
2. Write a function testComponent that is passed a reliability value and returns a Boolean value
3. Declare Boolean variable for each component that will indicate whether the component failed
4. Initialize a counter to keep track of the number of fails
5. Initialize the random number generator
6. Run simulation loop NUMTRIALS times
   1. Initialized Boolean variable to false
   2. Test each component
   3. Check if critical failure occurred and if so increment failure counter
7. Output the result of experiment. You should get something around 3%.