Project 1 Test Cases

I. ThreadGrader1: **Condition2**
   a. Test ThreadGrader1.a: Tests your condition variables using a few threads
   b. Test ThreadGrader1.b: Tests your condition variables using many threads
II. ThreadGrader2: **Communicator**
   a. Test ThreadGrader2.a: Tests your communicator
   b. Test ThreadGrader2.b: Tests your communicator, with more speakers/listeners
   c. Test ThreadGrader2.c: Tests your communicator, with more speakers/listneers, and transmits more messages
III. ThreadGrader3: **Join**
   a. Test ThreadGrader3.a: Tries a join on thread x before x actually runs
   b. Test ThreadGrader3.b: Tries a join on thread x after x has completed
IV. ThreadGrader4: **WaitUntil**
   a. Test ThreadGrader4.a: Tests waitUntil to ensure it waits at least minimum amount of time
   b. Test ThreadGrader4.b: Tests whether waitUntil actually wakes up at correct time
V. ThreadGrader5: **Priority Scheduling**
   a. Test ThreadGrader5.a: Tests priority scheduler without donation
   b. Test ThreadGrader5.c: Tests priority scheduler without donation, altering priorities of threads after they've started running
VI. ThreadGrader6a: **More Priority Scheduling**
   a. Test ThreadGrader6a.a: Tests priority donation
   b. Test ThreadGrader6a.b: Tests priority donation with more locks and more complicated resource allocation
VII. BoatGrader: **Boat Simulation**
   a. Tests BoatGrader2.a-BoatGrader2.f: Test boat simulation with various numbers of threads.
   b. Test stresstest: Tests boat simulation with a ton of threads.