For this assignment, you should start by copying the *Session09* project to a new project called *Assign04*. After copying an existing project into a new project, always build and run the new project before modifying it, to make sure you are building on solid ground.

**Part 1**: Keep the LED and pushbutton tasks in place and add a new proximity task. In Session 10 you will be given code for the ToF sensor. Modify the code to measure and display the proximity (in mm) every 100 msec. Get rid of all the banner output and simply update a 4-digit measurement on the line:

Distance: xxxx

**Part 2**: Add a new output task that waits for a new distance value to be received via a queue and then updates the display.

**This assignment must be emailed to tlupfer@sandiego.edu by midnight on Sunday, September 20th.**

**Make sure your name appears in the module comments at the top of any C and header files you create or modify.**

**Create a zipfile containing the *inc* and *src* directories of the project (and no other directories).**

**You should attach a single file named:  
  
 *lastname04.zip*  
  
In other words, my file would be named *lupfer04.zip***