# Lab 9 Threads Lab

# Week beginning 30/11/2015

1. Run the code for GreetingThreadTester a few times. Do the 2 GreetingRunnable threads always run in the same order?

2. Run the code in “ball bounce with no threads” folder and then the code in “ball bounce with threads” folder. “ball bounce with threads” uses a thread. Why is it necessary to use a thread here?

Remove the following line from the Ball class:

Thread.sleep(5);

What is the effect?

3. The code in “ball bounce with threads” folder has 2 buttons “Start” and “Close”. Add a button “Stop” that will stop

(a) the last ball

(b) the first ball

(c) all the balls

4. Write a program with a GUI. It should have a start button and something to display the time. When the start button is clicked, a thread should run in the background. It should sleep for a thousand milliseconds i.e. one second, and then update the time. To update the time, it is better to read the time from the system clock, as the call to the sleep method may take a few additional milliseconds.

Add controls to the GUI to enable it to be used as an alarm clock. Implement this.