**Initio Programming: Debugging Exercises**

**Note:** Both this programs are for the virtual Initio. To adapt to the Initio replace simclient.simrobot with robohat. It is recommended that debugging is done in the simulation before being tested on the robot.

**Exercise 1:** Consider the following program. It is supposed to run for 1 minute, taking a distance reading every three seconds and then print the average distance. It contains two errors use the error messages and IDLE debugger to find them.

import simclient.simrobot as initio

import time

initio.init()

count = 0

total\_distance = 0

while (count < 20):

 total\_distance = total\_distance + initio.getDistance()

 time.sleep(3)

 count = count + 1

average = total\_distance \* count

print("The Average Distance is: " + average)

**Exercise 2:** Consider the following program. What is wrong with it? Use the IDLE debugger to find the cause of the problem and propose a fix.

import simclient.simrobot as initio

import time

initio.init()

count = 0

total\_distance = 0

while (total\_distance < 20):

 time.sleep(3)

 count = count + 1

print("Done")



 University of Liverpool, 2019

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