**Virtual Pi2Go Programming: Debugging Exercises**

**AIM:** This exercise sheet provides exercise in debugging.

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

import simclient.simrobot as pi2go

import time

pi2go.init()

count = 0

total\_distance = 0

while (count < 20):

total\_distance = total\_distance + pi2go.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 pi2go

import time

pi2go.init()

count = 0

total\_distance = 0

while (total\_distance < 20):

time.sleep(3)

count = count + 1

print("Done")



University of Liverpool, 2019

This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/).