**Virtual Initio Programming: WS7 Sample Answers and Troubleshooting**

**Sample Answer 1:** The robot moves forward for 10 seconds or print the value from the distance sensor and move backwards for 10 seconds (answer depends upon whether the student had something in front of the robot or not - in the simulation probably not)

**Sample Answer 2:** To test the robot was working you need to test its behaviour both when there is an obstacle (it should move backward) and when there isn’t (it should move forward).

**Sample Answer 3:**

import simclient.simrobot as initio, time

initio.init()

if (initio.irLeft()):

 initio.spinRight(10)

elif (initio.irRight()):

 initio.spinLeft(10)

time.sleep(10)

pi2go.stop()

Three cases are needed to test this (something on the left, something on the right and nothing on either side).

The description of the exercise doesn’t say what to do if there is an obstacle on both sides of the robot.

**Sample Answer 4:**

import simclient.simrobot as initio, time

initio.init()

if (initio.getDistance() < 30):

 initio.reverse(10)

 time.sleep(10)

 initio.spinRight(10)

 time.sleep(10)

 initio.stop()

else:

 initio.forward(10)



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