Depth Mapping Software P2

demo\_cv2\_threshold.py:

This program displays two windows: one with the RGB video and the other is a depth video in monochrome. There are also two sliders that allows you to change the threshold and the depth of the monochrome video. Changing the depth shows the objects in different depths, so setting the depth to zero shows the objects in the foreground and as the depth increases it shows the objects farther back. The Threshold slider controls how far back the Kinect can see.

demo\_tilt.py:

This program makes the Kinect change the angle at which it is set. It randomly picks a new angle after 3 seconds to set the tilt of the Kinect. However, this program takes much longer than 3 seconds to run. We presume that the delay is due to the fact that the raspberry pi is not fast enough in communicating with the Kinect.

demo\_cv2\_thresh\_sweep.py:

This program is similar to the demo\_cv2\_threshold.py program in that it is a monochrome video of the depths. Unlike the demo\_cv2\_threshold.py program, this program does not allow the user to choose the values of the depth and threshold. Instead it sweeps the values of the depths and increases them by 20 units every 0.1 seconds. After the depth values reach the upper limit, the program terminates and closes the display window.