Task 7.3D – Answers

Question #1

https://youtu.be/ecneYe0Jg3M

Question #2

https://github.com/Goolog/SIT210_Task7.3D_RPiPWM

Question #3

Sometimes the system freezes due to the code. This is because the sensor's echo input gets stuck at 0. I could improve the system by fixing the code that handles the reading of the sensors. Another improvement could be that I could use a button to switch between different distance thresholds. So a user could press a button to get the LED to begin to brighten at further distances. The system could also make use of more LEDs. Perhaps a green, yellow and red LEDs can be used. Green could be for an object that is detected to be pretty far away while yellow represents the object as getting closer and red can represent an object that is detected to be very close. If being used for a defense system, it could also have an alarm buzzer that goes off when an object is either very close or is getting closer at a very high velocity.