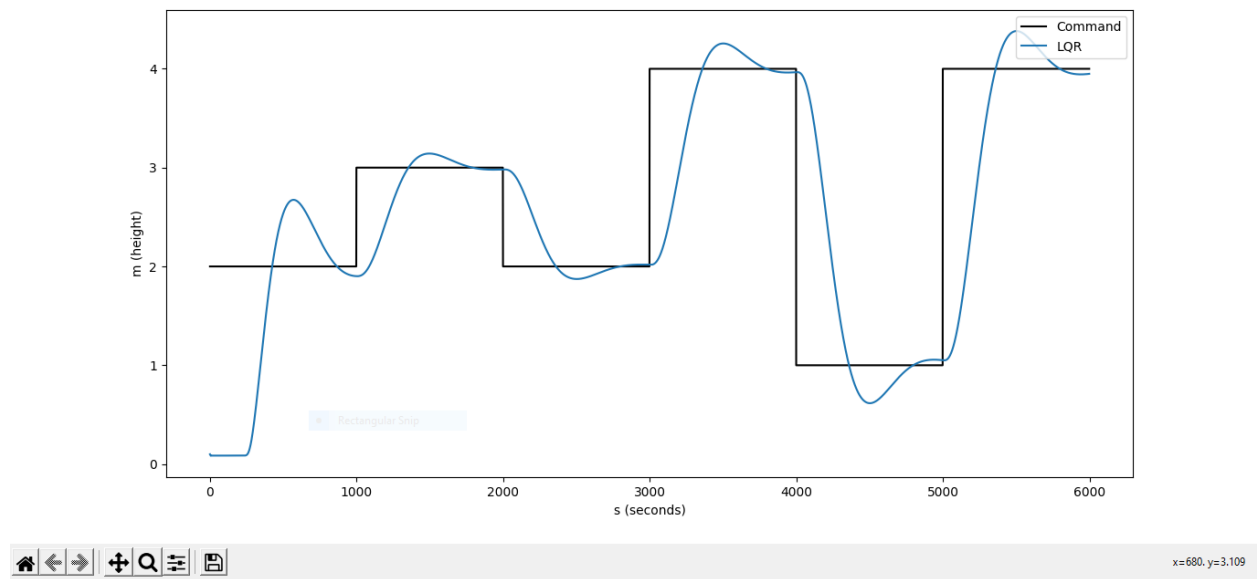


# 24677 Project 5

-Navodit Chandra

## Exercise 1:

Figure 1



Time: 59.99

[69.34864309 69.47589873 69.04810789 69.17591996]

Time: 60.0

=====YOUR RESULT=====

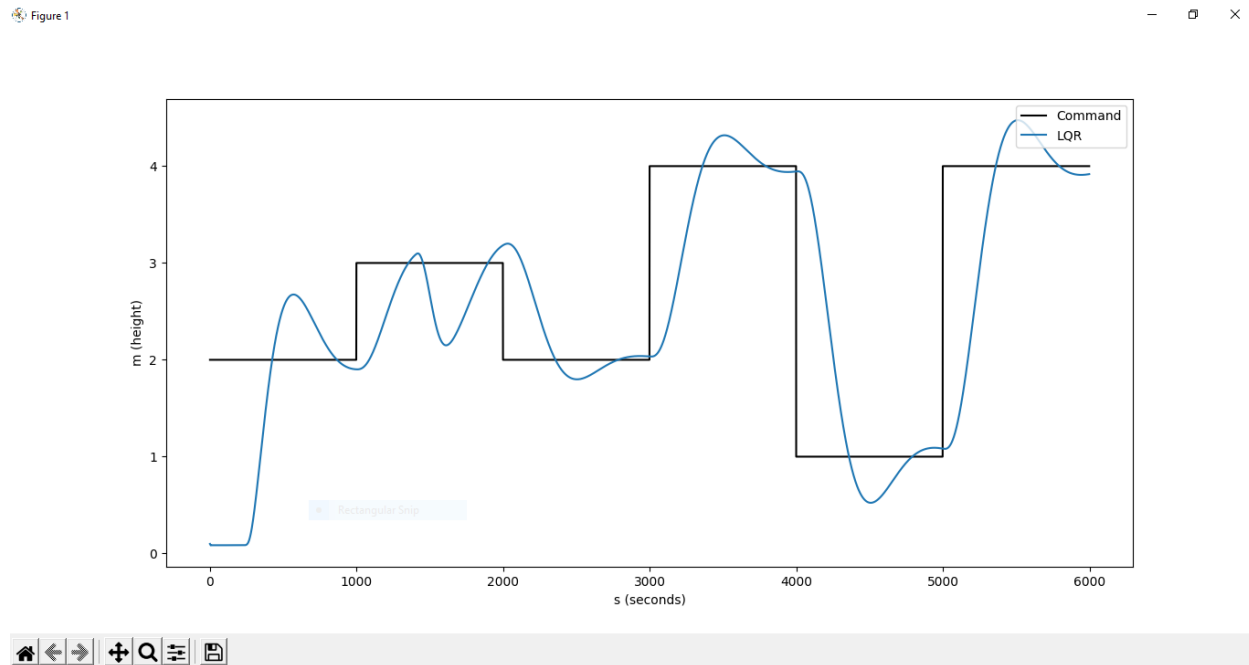
ERROR: 0.204

SCORE: 50.000

## Exercise 2:

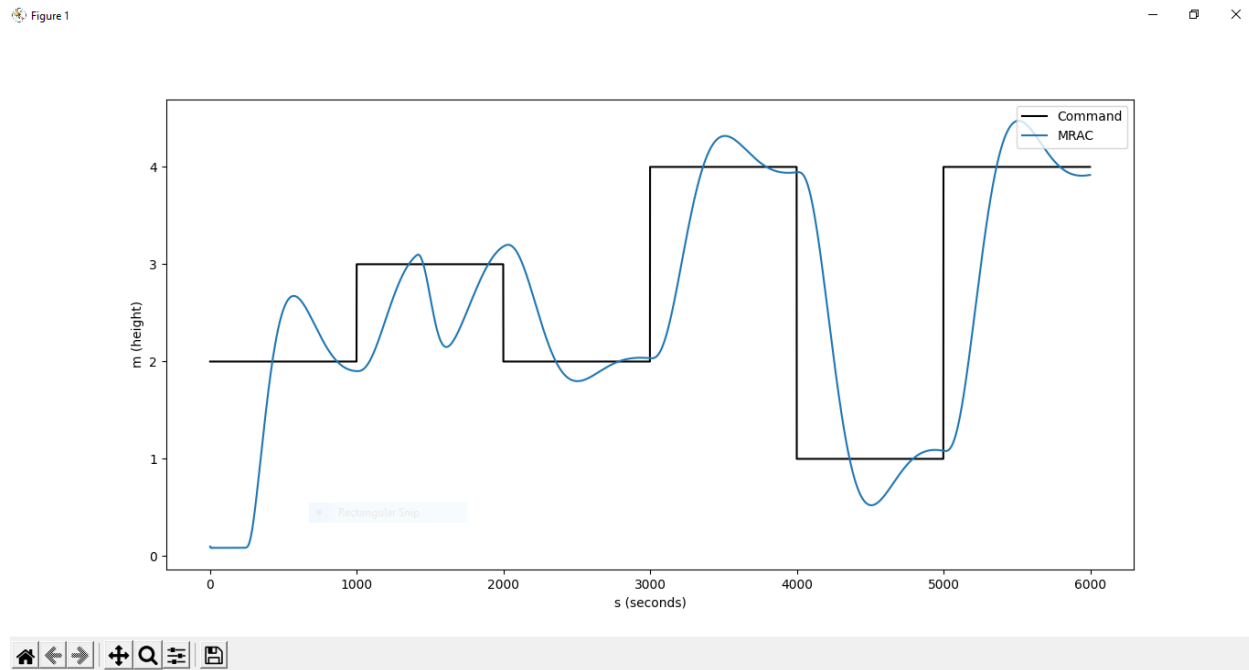
### Part 1) When loss of thrust is 50%

Figure 1



LQR

Figure 1



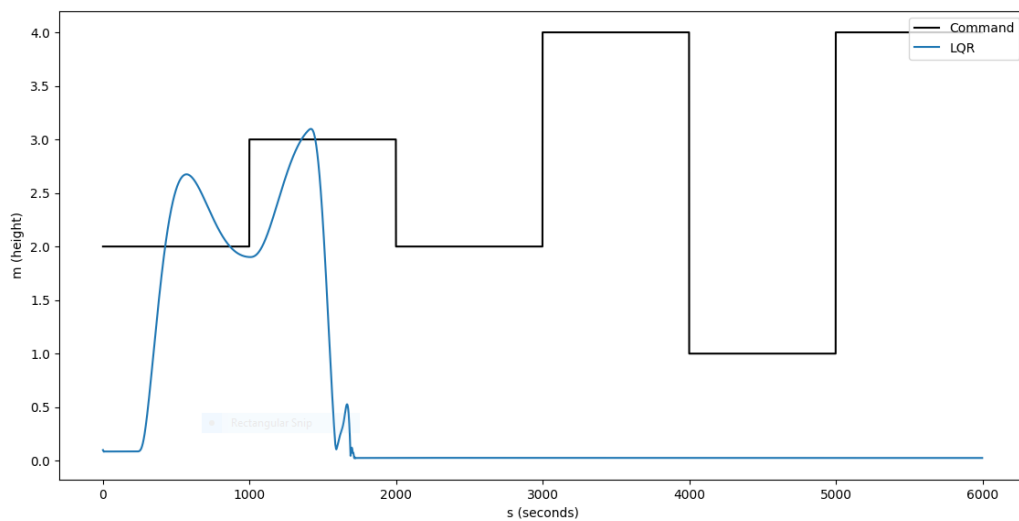
MRAC

Both LQR and MRAC are able to stabilize the system with 50% loss of thrust in one motor.

## Exercise 2:

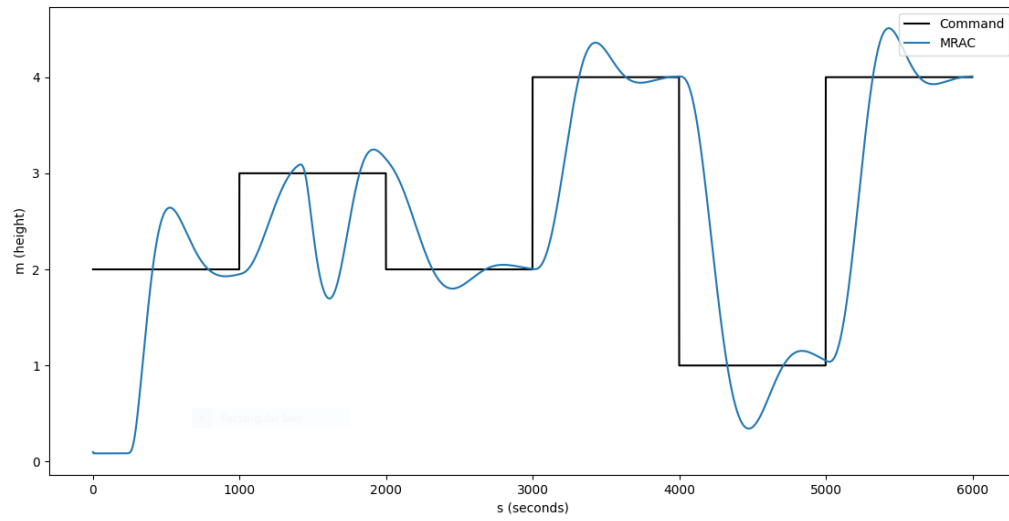
**Part 2)** When loss of thrust in one motor is **68%**, LQR fails (the drone falls onto the floor) but MRAC is still able to maintain tracking.

Figure 1



LQR

Figure 1



MRAC