

## Lab 1

### Post Lab

#### Question 4.1)

- Stabilize
  - This flight mode automatically levels both the roll and pitch to allow the quadcopter to stay flat relative to the horizontal axis.
- Alt Hold
  - This flight mode is similar to the stabilize flight mode, but it also locks the altitude, so the quadcopter doesn't move up or down.
- Loiter
  - This flight mode locks the altitude and position and uses the GPS to send movements/coordinates to the quadcopter for movement.

#### Question 4.2)

- GPS are not reliable indoors due to the fact that the signals being transmitted from the satellite to the GPS device are scattered or interrupted easily by rooftops and walls.

#### Question 4.3)

- Alt Hold would be feasible indoors and the safest indoors because unlike stabilize, the altitude is held the same and the quadcopters pitch and roll are stabilized.

#### Question 4.4)

- The duty cycle is 25%

