

## **The workflow:**

First we should setup the IMU with the value 0 in address 0x6B set the scale for 250 degree/sec.

We do this by using the setImuRegister function that works by I2C communication.

There is also the readImu2Byte function to read 2 bytes first by reading from [15:8] and then shift those bits to read the bits from [7:0] and to put them in the byte we use bit wise or to join the 2 bytes.

After that we use the calibrateImu function to get the offset value and then subtracted from the read value.

In the end we use those values to check for the angles of the object to turn on the led if the roll or the pitch angle is more than 60 degree.