#include<Wire.h>

const int MPU = 0x68; // I2C address of the MPU-6050

int16\_t AcX, AcY, AcZ, Tmp, GyX, GyY, GyZ;

int sensorValue = 0; //6050 value

int throttle = 0; // throttle value

int valt = 0;

int r;

int vall=0;

int valr=0;

void setup()

{

Serial.begin(9600);

Wire.begin();

Wire.beginTransmission(MPU);

Wire.write(0x6B); // PWR\_MGMT\_1 register

Wire.write(0); // set to zero wakes up the MPU-6050

Wire.endTransmission(true);

pinMode(7, INPUT);

pinMode(4, OUTPUT);

digitalWrite(4, HIGH);

//motor pins

pinMode(5, OUTPUT); //mot right +v

pinMode(6, OUTPUT); //mot right -V

pinMode(9, OUTPUT); //mot left -v

pinMode(10, OUTPUT); //mot right +v

//motor pins

}

void loop()

{

throttle = analogRead(A0) ;

r = digitalRead(12);

Wire.beginTransmission(MPU);

Wire.write(0x3B); // starting with register 0x3B (ACCEL\_XOUT\_H)

Wire.endTransmission(false);

Wire.requestFrom(MPU, 14, true); // request a total of 14 registers

AcX = Wire.read() << 8 | Wire.read(); // 0x3B (ACCEL\_XOUT\_H) & 0x3C (ACCEL\_XOUT\_L)

AcY = Wire.read() << 8 | Wire.read(); // 0x3D (ACCEL\_YOUT\_H) & 0x3E (ACCEL\_YOUT\_L)

Tmp = Wire.read() << 8 | Wire.read(); // 0x41 (TEMP\_OUT\_H) & 0x42 (TEMP\_OUT\_L)

Serial.print("AcX = "); Serial.print(AcX);

Serial.print(" | AcY = "); Serial.print(AcY);

Serial.print(" | Tmp = "); Serial.print(Tmp / 340.00 + 36.53);

Serial.print("pin="); Serial.print(r);//equation for temperature in C

Serial.print(" throttel value = "); Serial.println(throttle);

sensorValue = AcX;

if (throttle<170)

{

valr = map(AcY, -1800, -4000, 0, 255);

vall = map(AcY, 1800, 4500, 0, 255);

if ( AcY < -1800)

{

analogWrite(5, LOW );

analogWrite(6, 1.25\*

+3

valr);

analogWrite(9, LOW);

analogWrite(10, LOW);

}

else if (AcY > 1800)

{ analogWrite(5, LOW );

analogWrite(6, LOW);

analogWrite(9, LOW);

analogWrite(10, vall);

}

else

{ analogWrite(5, LOW );

analogWrite(6, LOW);

analogWrite(9, LOW);

analogWrite(10, LOW);

}

}

else

{ if (throttle > 165)

{ valt = map(throttle, 165, 535, 0, 255);

analogWrite(5, LOW );

analogWrite(6, 1.25\*valt);

analogWrite(9, LOW);

analogWrite(10, valt);

}

}

delay(300);

}