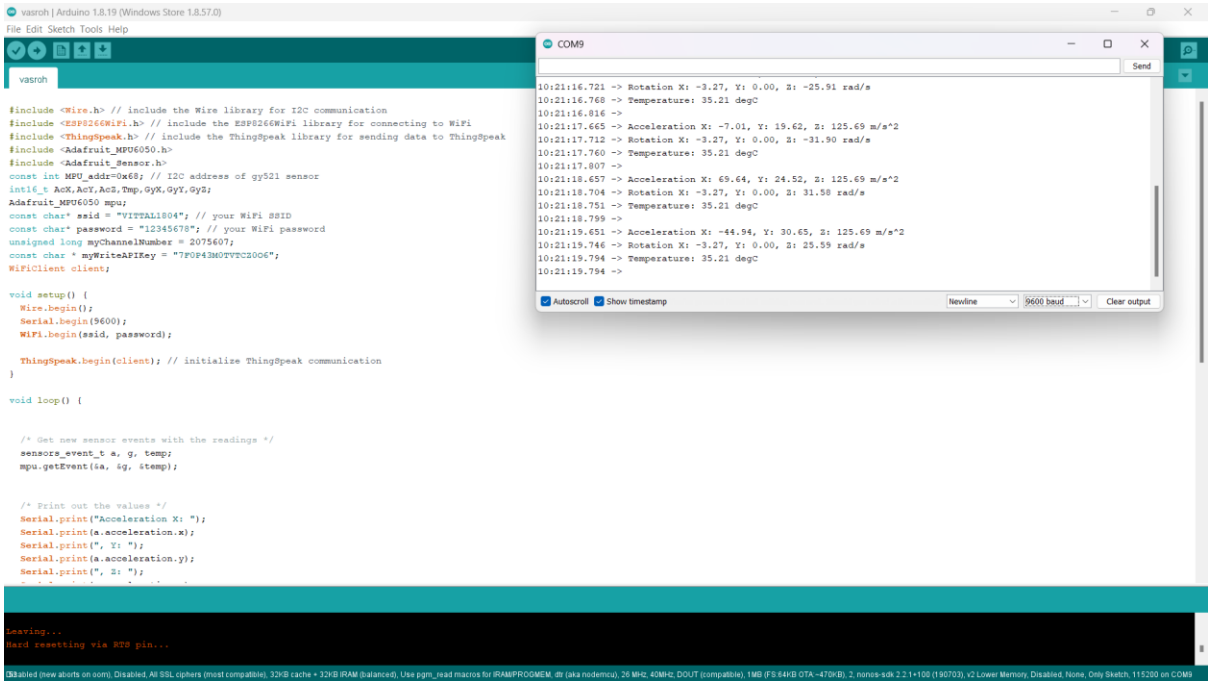
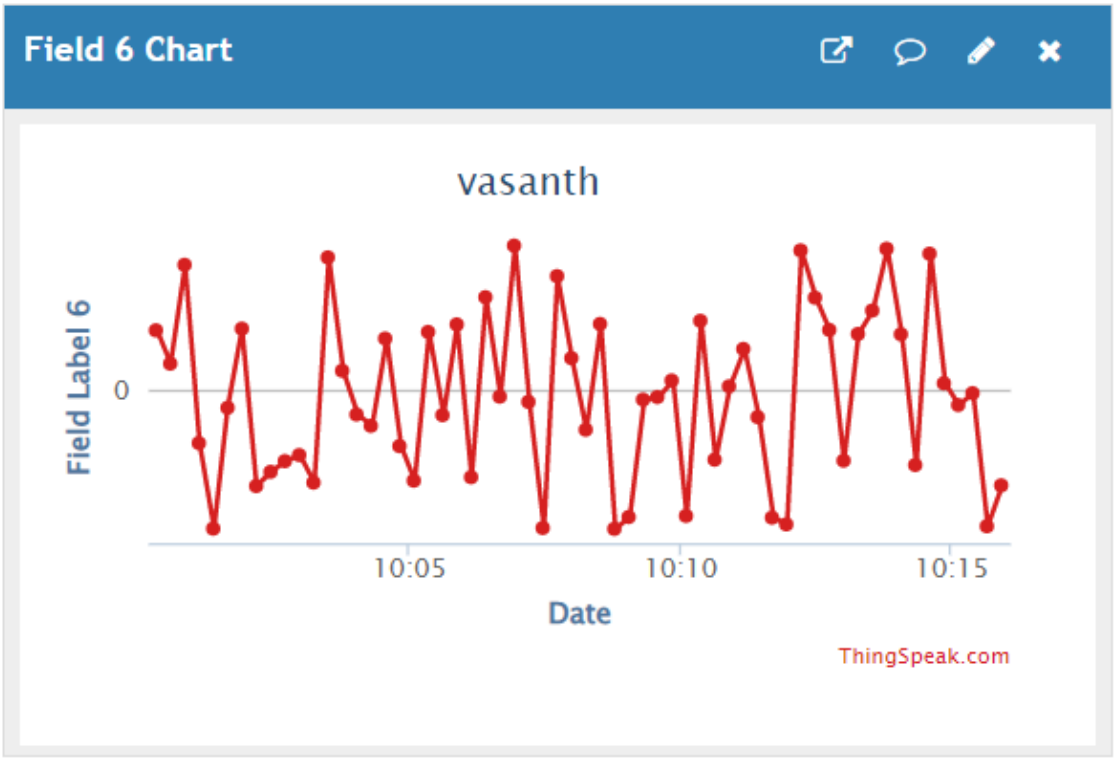
```
#include <Wire.h> // include the Wire library for I2C communication
#include <ESP8266WiFi.h> // include the ESP8266WiFi library for connecting to WiFi
#include <ThingSpeak.h> // include the ThingSpeak library for sending data to ThingSpeak
#include <Adafruit_MPU6050.h>
#include <Adafruit_Sensor.h>
const int MPU_addr=0x68; // I2C address of gy521 sensor
int16_t AcX,AcY,AcZ,Tmp,GyX,GyY,GyZ;
Adafruit_MPU6050 mpu;
const char* ssid = "VITTAL1804"; // your WiFi SSID
const char* password = "12345678"; // your WiFi password
unsigned long myChannelNumber = 2075607;
const char * myWriteAPIKey = "7F0P43M0TVTCZ0O6";
WiFiClient client;

void setup() {
  Wire.begin();
  Serial.begin(9600);
  WiFi.begin(ssid, password);

  ThingSpeak.begin(client); // initialize ThingSpeak communication
}

void loop() {


  /* Get new sensor events with the readings */
  sensors_event_t a, g, temp;
  mpu.getEvent(&a, &g, &temp);


  /* Print out the values */
```

```
Serial.print("Acceleration X: ");
Serial.print(a.acceleration.x);
Serial.print(", Y: ");
Serial.print(a.acceleration.y);
Serial.print(", Z: ");
Serial.print(a.acceleration.z);
Serial.println(" m/s^2");

Serial.print("Rotation X: ");
Serial.print(g.gyro.x);
Serial.print(", Y: ");
Serial.print(g.gyro.y);
Serial.print(", Z: ");
Serial.print(g.gyro.z);
Serial.println(" rad/s");

Serial.print("Temperature: ");
Serial.print(temp.temperature);
Serial.println(" degC");

Serial.println("");

ThingSpeak.setField(1, a.acceleration.x);
ThingSpeak.setField(2, a.acceleration.y);
ThingSpeak.setField(3, a.acceleration.z);
ThingSpeak.setField(4, g.gyro.x);
ThingSpeak.setField(5, g.gyro.y);
ThingSpeak.setField(6, g.gyro.z);

delay(500);
// Write to ThingSpeak. There are up to 8 fields in a channel, allowing you to store up to 8 different
```

```
  // pieces of information in a channel.  Here, we write to field 1.
  int x = ThingSpeak.writeFields(myChannelNumber, myWriteAPIKey);
  delay(500);
}
```




Field 6 Chart
vasanth
Field Label 6
0
10:05
10:10
10:15
Date
ThingSpeak.com