

EX 10 – Store sensor data in public or private cloud

CODE

```
#include <Ethernet.h>

#include "ThingSpeak.h"

byte mac[] = { 0xDE, 0xAD, 0xBE, 0xEF, 0xFE, 0xED };

String waterData;

unsigned long channelNumber = 2681449;

const char* channelKey = "BI7DVBXMOV06254NS";

int id = 1;

EthernetClient client;

void setup() {
    Serial.begin(9600);
    if (Ethernet.begin(mac) == 0) {
        Serial.println("Failed to configure Ethernet using DHCP");
    } else {
        Serial.println("configured Ethernet using DHCP");
        IPAddress myIPAddress = Ethernet.localIP();
        Serial.println(myIPAddress);
    }
    delay(500);
    ThingSpeak.begin(client);
}

void loop(){
    waterData = String((float)analogRead(A0), DEC);
    useThingSpeakApi(waterData);
    delay(5000);
}

void useThingSpeakApi(String data){
    int x = ThingSpeak.writeField(channelNumber, 1, data, channelKey);
    if(x == 200){
```

```

Serial.println("Channel update successful with field1="+data);
}
else{
Serial.println("Problem updating channel. HTTP error code " + String(x));
}
}
}

```

OUTPUT :

lpg

Channel ID: 2681449
Author: mwa0000035371473
Access: Private

Private View Public View Channel Settings Sharing API Keys Data Import / Export

Add Visualizations Add Widgets Export recent data

MATLAB Analysis MATLAB Visualization

Channel Stats

Created: 13 minutes ago
Entries: 8

Field 1 Chart

lpg

Field Label 1

Date

ThingSpeak.com

This website uses cookies to improve your user experience, personalize content and ads, and analyze website traffic. By continuing to use this website, you consent to our use of cookies. Please see our Privacy Policy to learn more about cookies and how to change your settings.