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 = "BI7DVBXMV06254NS";
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 :