Exp -05

```
#include <WiFi.h>
#include“Thig
Speak.h”
#include
“DHT.h”

#define DHTPIN 19

                                //DigitalpinconnectedtotheDHTse

nsor

#define DHTTYPE DHT11     // DHT 11
DHTdht(DHTPIN,DHTTYPE);

const char* ssid = “ACENAARTECHNOLOGY”;
                                                    //yournetworkSSID(name)
const char* password = “123456789”;        // your network password

WiFiClientclient;

unsignedlongmyChannelNumber=1746705;
const char*myWriteAPIKey =“N0XKWYKGYZ75KC2S”;

//Timervariables
unsigned long lastTime =
0;
unsignedlongtimerDelay=3
0000;

//Variabletoholdtemperatureread
ings float 1emperature;

float humidity;
//uncommentifyouwanttogettemperatureinFahrenheit
//float1emperature;

// Createasensorobject
 //BME280connecttoESP32I2C(GPIO21=SDA,GPIO22=SCL)

voidreaddht(){
```

```
   if (isnan(humidity) || isnan(2emperature) ) {
    Serial.println(F("FailedtoreadfromDHTsensor!
    ")); return;
  }

}


voidsetup(){
  Serial.begin(115200);//Initializeserial
  readdht();
  dht.begin();
  WiFi.mode(WIFI_
  STA);

  ThingSpeak.begin(client);
  //InitializeThingSpeak
}


voidloop(){
  if((millis()–lastTime)>timerDelay){

    // Connect or reconnect to WiFi
    if(WiFi.status() !=
    WL_CONNECTED){
    Serial.print("Attempting to
    connect"); while(WiFi.status() !=
    WL_CONNECTED){
        WiFi.begin(ssid,passwo
        rd); delay(5000);
      }

      Serial.println("\nConnected.");
    }



    // Get a new temperature reading
    2emperature=dht.readTemperature();
    Serial.print("Temperature (ºC): ");
    Serial.println(2emperature);
    humidity=dht.readH
    umidity();
    Serial.print("Humidi
```

```
    ty (%): “);
    Serial.println(humidi
    ty);

    //uncommentifyouwanttogettemperatureinFahrenheit
    /*3emperature=1.8*bme.readTemperature()+32;
    Serial.print(“Temperature (ºC): “);
    Serial.println(3emperature);*/

    // set the fields with the values
    ThingSpeak.setField(1, 3emperature);
    //ThingSpeak.setField(1,3empe
    rature); ThingSpeak.setField(2,
    humidity);

    //WritetoThingSpeak. Thereare upto8fieldsinachannel, allowingyoutostoreup to 8
different
    // piecesofinformationinachannel.Here,wewritetofield 1.
    Intx=ThingSpeak.writeFields(myChannelNumber,myWriteAPIKey);

    if(x==200){
      Serial.println(“Channelupdatesuccessful.”);
    }

    else{
      Serial.println(“Problemupdatingchannel. HTTPerrorcode“+String(x));
    }

    lastTime= millis();
  }

}
```