```cpp
#include <SoftwareSerial.h>
#define RX 2
#define TX 3
String AP = "Wifi_Name"; // AP NAME
String PASS = "Wifi_Pwd"; // AP PASSWORD
String API = "Api_Key"; // Write API KEY
String HOST = "api.thingspeak.com";
String PORT = "80";
int countTrueCommand;
int countTimeCommand;
boolean found = false;
int valSensor = 1;

SoftwareSerial esp8266(RX,TX);

void setup() {
 Serial.begin(9600);
 esp8266.begin(115200);
 sendCommand("AT",5,"OK");
 sendCommand("AT+CWMODE=1",5,"OK");
 sendCommand("AT+CWJAP=\""+ AP +"\",\""+ PASS +"\"",20,"OK");
}
void loop() {

String getData = "GET /update?api_key="+ API
+"&field1="+getTemperatureValue()+"&field2="+getLDRValue();
sendCommand("AT+CIPMUX=1",5,"OK");
sendCommand("AT+CIPSTART=0,\"TCP\",\""+ HOST +"\","+ PORT,15,"OK");
sendCommand("AT+CIPSEND=0," +String(getData.length()+4),4,">");
esp8266.println(getData);delay(1500);countTrueCommand++;
sendCommand("AT+CIPCLOSE=0",5,"OK");
}
String getTemperatureValue()
{
 int temp;
 temp=analogRead(A1)/10.24;
 return String(temp);
}
String getLDRValue()
{
int ldr=analogRead(A0);
return String(ldr);
}
void sendCommand(String command, int maxTime, char readReplay[]) {
 Serial.print(countTrueCommand);
 Serial.print(". at command => ");
 Serial.print(command);
 Serial.print(" ");
```

```
while(countTimeCommand < (maxTime*1))
{
esp8266.println(command);//at+cipsend
if(esp8266.find(readReplay))//ok
{
found = true;
break;
}
countTimeCommand++;
}
if(found == true)
{
Serial.println("OYI");
countTrueCommand++;
countTimeCommand = 0;
if(found == false)
{
Serial.println("Fail");
countTrueCommand = 0;
countTimeCommand = 0;
}
found = false;
}
```