CODE:

```
#include <LiquidCrystal.h>

const int rs = 13, en =12, d4 =11, d5 =10, d6 =9, d7
=8;

LiquidCrystal lcd(rs, en, d4, d5, d6, d7);

const int TEMPERATURE_PIN = A0;  // Analog
input pin

const int HUMIDITY_PIN = A1;  // Analog input pin

const int LDR_PIN = A2;  // Analog input pin

const int SOILMOITURE_PIN = A3;  // Analog input
pin

const int motorpin =  A4;

// the number of the LED p

int Temperature_value =
0,Soil_value=0,Humidity_value=0,Ldr_value=0;

int sec1=0,tst1=0;

int s;

void setup()

{

Serial.begin(115200);  // Set it according to your esp's
baudrate. Different esp's have different

baud rates.

pinMode(motorpin, OUTPUT);

pinMode(7, INPUT);

lcd.begin(16, 2);

// Print a messageeto the LCD.

lcd.setCursor(0, 0);

lcd.print("  Welcome To    ");

// (note: line 1 is the second row, since counting
begins with 0):

lcd.setCursor(0, 1);

// Print a message to the LCD.

lcd.print("SMART FORMING SYS   ");

// initialize serial:
```

```
delay(5000);
}
void loop()
{

  lcd.clear();
  s=digitalRead(7);
 Temperature_value =
analogRead(TEMPERATURE_PIN);
 Soil_value = digitalRead(SOILMOITURE_PIN);
 Humidity_value = analogRead(HUMIDITY_PIN);
  Ldr_value = analogRead(LDR_PIN);
  Serial.println(  Temperature_value);
Send_Wifi();
if(s==0)
{
 Digital Write(motorpin,1);
}
if(s==1)
{
 Digital Write(motorpin,0);
}
if( Temperature_value>950)
{
 Digital Write(motorpin,1);
}
If ( Temperature_value<950)
{
 digitalWrite(motorpin,0);
}
}
void Send_Wifi()
{
```

```
    Serial.print("AT\r\n");
     delay(1000);
     Serial.print("AT+CWMODE=3\r\n");
     delay(2000);
     Serial.print("AT+CIPMUX=1\r\n");
     delay(2000);



     Serial.print("AT+CWJAP=\"VITS\",\"12345678\"\
r\n"); //ssid and password
     delay(10000);
     Serial.print("AT+CIPSTART=4,\"TCP\",\"184.106
.153.149\",80\r\n");
     delay(5000);
     Serial.print("AT+CIPSEND=4,106\r\n");
     delay(3000);
     Serial.print("GET
/update?key=LGCHCXT0A9H3XP50&field1=");
     UARTWriteInt(Temperature_value,4);
     Serial.print("&field2=");
     UARTWriteInt( Soil_value,4);
     Serial.print("&field3=");
     UARTWriteInt( Humidity_value,4);
     Serial.print("&field4=");
     UARTWriteInt( Ldr_value,4);
     delay(300);
     Serial.print("\r\n");
}
void UARTWriteInt(long val,unsigned int
field_length)
{
  char str[10]={0,0,0,0,0,0,0,0,0,0};
  int i=9,j=0;
  while(val)
```

```
{
str[i]=val%10;
val=val/10;
i--;
}
j=10-field_length;
if(val<0) Serial.write(' ');
for(i=j;i<10;i++)
{

Serial.write(48+str[i])
```