```
#include <LiquidCrystal.h>
LiquidCrystal lcd(8, 9, 10, 11, 12, 13);

#include "DHT.h"
#define DHTPIN 5
#define DHTTYPE DHT11
DHT dht(DHTPIN, DHTTYPE);

#include <Servo.h>
Servo servo1;
Servo servo2;

int rled=7;
int gled=6;


int ldr1=A0;
int ldr2=A2;
int ldr3=A3;
int ldr4=A1;
int xmin=45;
int xmax=135;
int xpos=90;
int ymin=45;
int ymax=135;
int ypos=90;
void setup() {

  servo1.attach(3);
  servo2.attach(4);
  delay(500);
  servo1.write(90);
  servo2.write(90);
   lcd.begin(16,2);
  lcd.print("WELCOME TO");
  lcd.setCursor(0,1);
  lcd.print("   PROJECT-11");
  delay(3000);
  Serial.begin(9600);
  lcd.clear();
    lcd.print("DUAL AXIS SOLAR");
  lcd.setCursor(0,1);
  lcd.print("TRACKING SYSTEM");
  delay(3000);
  dht.begin();
  pinMode(rled,OUTPUT);
  pinMode(gled,OUTPUT);
  digitalWrite(rled,0);
  digitalWrite(gled,0);


}

void loop()
{


  int l1val=analogRead(ldr1);
```

```
  int l2val=analogRead(ldr2);
  int l3val=analogRead(ldr3);
  int l4val=analogRead(ldr4);
  int tval=dht.readTemperature();
  int hval=dht.readHumidity();
  int rval=100-analogRead(A4)/10.24;
  lcd.clear();
  lcd.print("T:"+String(tval)+ " H:"+String(hval) +" R:"+String(rval));
  lcd.setCursor(0,1);
  lcd.print(String(l1val/100)+" "+String(l2val/100)+"
"+String(l3val/100)+" "+String(l4val/100));

  if(tval>37  || hval<35 || rval>70)
  {
    lcd.setCursor(8,1);
    lcd.print("Abnormal");
  }
  Serial.println("L1:"+String(l1val) + " L2:"+String(l2val) + "
L3:"+String(l3val)+ " L4:"+String(l4val));
  if(l1val>700)
  {
  Serial.println("East");
  if(xpos<xmax)
  xpos=xpos+1;

  }

  else if(l2val>700)
  {
   Serial.println("North");
   if(ypos<ymax)
  ypos=ypos+1;
  }
   else if(l3val>700)
   {
    Serial.println("west");
    if(xpos>xmin)
     xpos=xpos-1;

   }
    else if(l4val>700)
    {
     Serial.println("South");
       if(ypos>ymin)
     ypos=ypos-1;
    }


if(rval>40)
{
  digitalWrite(rled,0);
  digitalWrite(gled,1);
}
else
{
    digitalWrite(rled,1);
  digitalWrite(gled,0);
}
```

```
  delay(30);
  servo1.write(xpos);
  servo2.write(ypos);

}
```