#include <SoftwareSerial.h>

SoftwareSerial s(11,12);

#include <LiquidCrystal.h>

const int rs = 7, en = 6, d4 = 5, d5 = 4, d6 = 3, d7 = 2;

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

int LDR\_pin = A0;

int V\_pin = A1;

int S\_relay = 9;

int W\_relay = 8;

int M\_relay = 10;

int pay\_pin = 17;

int slot\_pin = 19;

boolean slot\_B = 0;

float price = 0;

void setup() {

lcd.begin(16, 2);

pinMode(LDR\_pin, INPUT);

pinMode(V\_pin, INPUT);

pinMode(S\_relay, OUTPUT);

pinMode(W\_relay, OUTPUT);

pinMode(M\_relay, OUTPUT);

Serial.begin(115200);

s.begin(115200);

pinMode(18, INPUT\_PULLUP);

pinMode(pay\_pin, INPUT\_PULLUP);

pinMode(slot\_pin, INPUT\_PULLUP);

}

void loop() {

int LDR\_value = analogRead(LDR\_pin);

int V\_value = analogRead(V\_pin);

Serial.println(V\_value);

if(digitalRead(18) == LOW){

if (LDR\_value > 512){

digitalWrite(S\_relay, HIGH);

digitalWrite(W\_relay, LOW);

digitalWrite(M\_relay, LOW);

}

else if(V\_value > 50){

digitalWrite(S\_relay, LOW);

digitalWrite(W\_relay, HIGH);

digitalWrite(M\_relay, LOW);

}

else{

digitalWrite(S\_relay, LOW);

digitalWrite(W\_relay, LOW);

digitalWrite(M\_relay, HIGH);

}

price = price + 0.5;

}else{

digitalWrite(S\_relay, LOW);

digitalWrite(W\_relay, LOW);

digitalWrite(M\_relay, LOW);

}

float v = analogRead(A2);

int pp = map(v, 0, 607, 0, 100);

v = v/50.5;

lcd.clear();

lcd.setCursor(0, 0);

lcd.print("V ");

lcd.print(v);

lcd.setCursor(9, 0);

lcd.print("% = ");

lcd.print(pp);

lcd.setCursor(0, 1);

lcd.print("Amt = ");

lcd.print(price);

if(digitalRead(pay\_pin) == LOW){

price = 0;

slot\_B = 0;

}

if(digitalRead(slot\_pin) == LOW){

slot\_B = 1;

}

lcd.setCursor(15, 1);

lcd.print(slot\_B);

int x = price;

String Data\_a = "A";

String stringOne = Data\_a + x;

stringOne = stringOne + 'N';

s.print(stringOne);

delay(1000);

}