PROGRAM:

```
#include <LiquidCrystal_I2C.h>
#include <DHT.h>;
LiquidCrystal_I2C lcd(0x27, 16, 2);
#define DHTPIN 2
#define DHTTYPE DHT22
DHT dht(DHTPIN, DHTTYPE);
int chk;
float H;
float T;
int buzzer = 12;
void setup(){
  lcd.init(); lcd.backlight();  dht.begin();  pinMode(buzzer, OUTPUT);
  Serial.begin(9600);  Serial.println("DHT22 sensor with Arduino Uno
R3!");
  pinMode(9, OUTPUT);  pinMode(10, OUTPUT);  pinMode(11, OUTPUT);
}
void loop(){
  delay(2000);
  H = dht.readHumidity();
  T = dht.readTemperature();
  Serial.print("Humidity: ");
  Serial.print(H);
  Serial.println(" %; ");
  Serial.print("Temperature: ");
  Serial.print(T);
  Serial.println(" Fehernheat.\n");

  if(H >= 30.00 && T >= 30.00){
    digitalWrite(9, HIGH);
    digitalWrite(10, LOW);
    digitalWrite(11, LOW);
    lcd.println("   Too warm!    ");
    lcd.setCursor(0, 1);
    lcd.println("   Cool down!   ");
    lcd.setCursor(0, 0);
    digitalWrite(buzzer, 1); tone(buzzer, 900, 100);
    delay(400);
    digitalWrite(buzzer, 0); tone(buzzer, 900, 100);
    delay(400);
    digitalWrite(buzzer, 1); tone(buzzer, 900, 100);
    delay(400);
    digitalWrite(buzzer, 0); tone(buzzer, 900, 100);
    delay(400);
}else{

    digitalWrite(9, LOW);
```

```
    digitalWrite(10, LOW);
    digitalWrite(11, HIGH);
    lcd.println("Temp. & hum. are");  lcd.setCursor(0, 1);
    lcd.println("in normal limits");  lcd.setCursor(0, 0);
    digitalWrite(buzzer, 0);
  }
}
```

CIRCUIT:

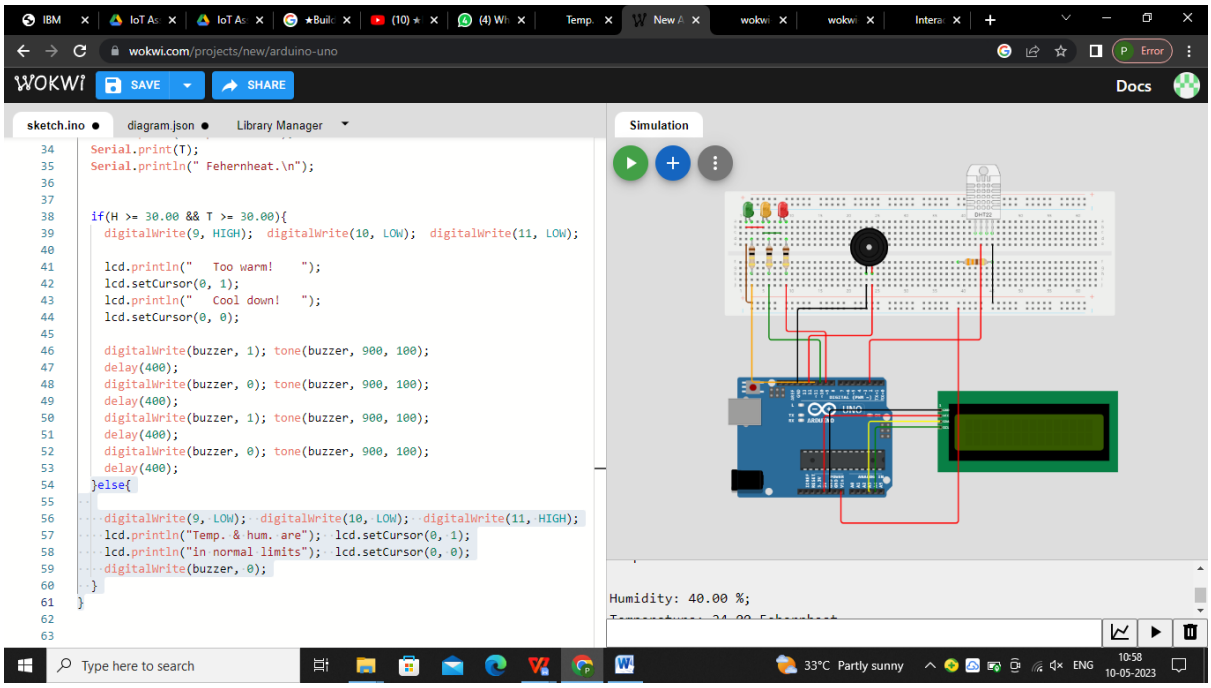
wokwi.com/projects/new/arduino-uno
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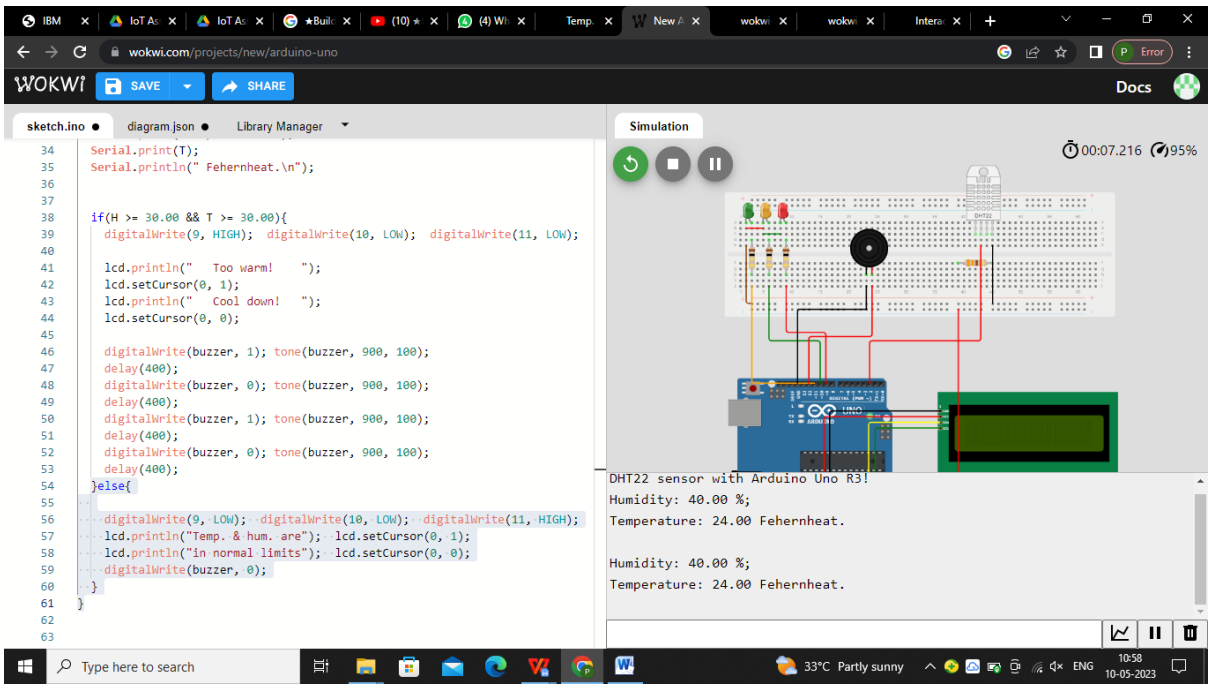
diagram.json
Library Manager
Simulation
Serial.print(T);
Serial.println(" Fehernheat.\n");
if(H >= 30.00 && T >= 30.00){
digitalWrite(9, HIGH); digitalWrite(10, LOW); digitalWrite(11, LOW);
lcd.println(" Too warm! ");
lcd.setCursor(0, 1);
lcd.println(" Cool down! ");
lcd.setCursor(0, 0);
digitalWrite(buzzer, 1); tone(buzzer, 900, 100);
delay(400);
digitalWrite(buzzer, 0); tone(buzzer, 900, 100);
delay(400);
digitalWrite(buzzer, 1); tone(buzzer, 900, 100);
delay(400);
digitalWrite(buzzer, 0); tone(buzzer, 900, 100);
delay(400);
}else{
digitalWrite(9, LOW); digitalWrite(10, LOW); digitalWrite(11, HIGH);
lcd.println("Temp. & hum. are"); lcd.setCursor(0, 1);
lcd.println("in normal limits"); lcd.setCursor(0, 0);
digitalWrite(buzzer, 0);
}
Humidity: 40.00 %;
Type here to search
33°C Partly sunny
ENG
10:58
10-05-2023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SAVE
SHARE
Docs
sketch.ino
diagram.json
Library Manager
Simulation
00:07.216
95%
Serial.print(T);
Serial.println(" Fehernheat.\n");
if(H >= 30.00 && T >= 30.00){
digitalWrite(9, HIGH); digitalWrite(10, LOW); digitalWrite(11, LOW);
lcd.println(" Too warm! ");
lcd.setCursor(0, 1);
lcd.println(" Cool down! ");
lcd.setCursor(0, 0);
digitalWrite(buzzer, 1); tone(buzzer, 900, 100);
delay(400);
digitalWrite(buzzer, 0); tone(buzzer, 900, 100);
delay(400);
digitalWrite(buzzer, 1); tone(buzzer, 900, 100);
delay(400);
digitalWrite(buzzer, 0); tone(buzzer, 900, 100);
delay(400);
}else{
digitalWrite(9, LOW); digitalWrite(10, LOW); digitalWrite(11, HIGH);
lcd.println("Temp. & hum. are"); lcd.setCursor(0, 1);
lcd.println("in normal limits"); lcd.setCursor(0, 0);
digitalWrite(buzzer, 0);
}
DHT22 sensor with Arduino Uno R3!
Humidity: 40.00 %;
Temperature: 24.00 Fehernheat.
Humidity: 40.00 %;
Temperature: 24.00 Fehernheat.
Type here to search
33°C Partly sunny
ENG
10:58
10-05-2023