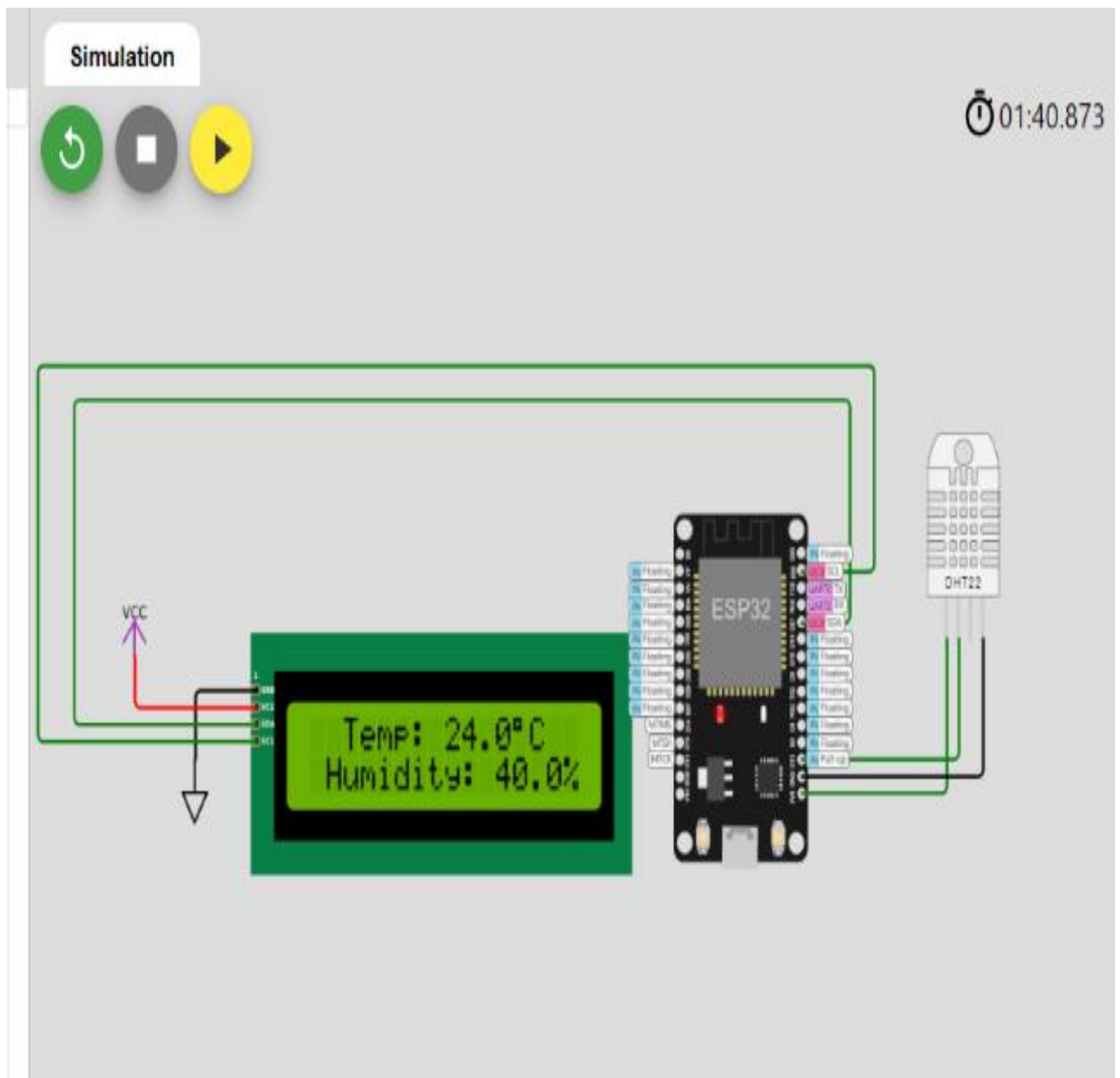


Environmental Monitoring using IOT:

INTERFACING DHT22 SENSOR WITH ESP32 IN WOKWI SIMULATOR

INTERFACING DIAGRAM:



CODE:

```
#include "DHTesp.h"
#include <LiquidCrystal_I2C.h>
#define I2C_ADDR 0x27
#define LCD_COLUMNS 16
#define LCD_LINES 2

const int DHT_PIN = 15;

DHTesp dhtSensor;

LiquidCrystal_I2C lcd(I2C_ADDR, LCD_COLUMNS, LCD_LINES);

void setup() {

    Serial.begin(115200);
    dhtSensor.setup(DHT_PIN, DHTesp::DHT22);
    lcd.init();
    lcd.backlight();

}

void loop() {

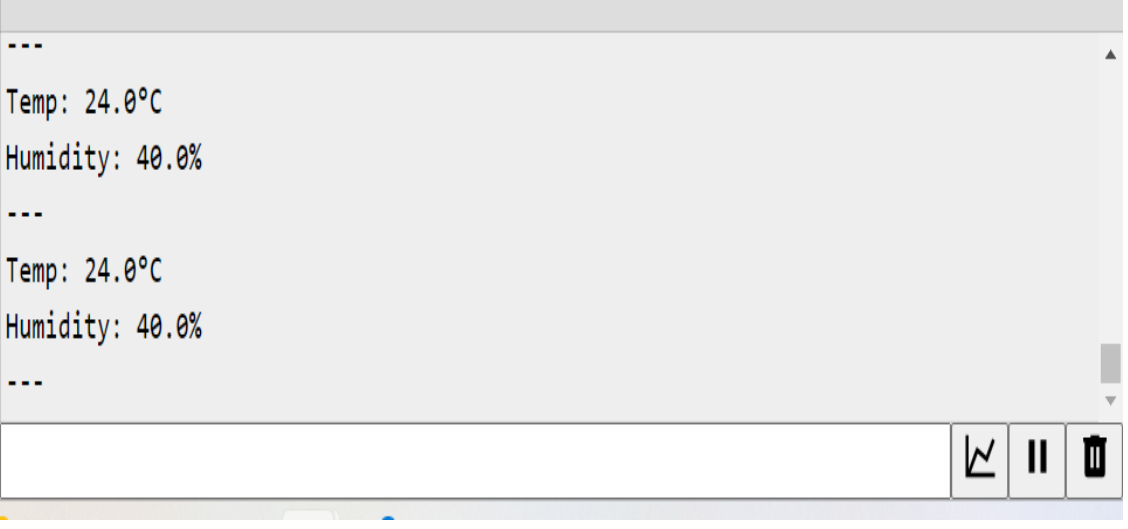
    TempAndHumidity data = dhtSensor.getTempAndHumidity();
    Serial.println("Temp: " + String(data.temperature, 1) + "°C");

    Serial.println("Humidity: " + String(data.humidity, 1) + "%");
    Serial.println("---");

    lcd.setCursor(0, 0);
    lcd.print(" Temp: " + String(data.temperature, 1) + "°C ");
    lcd.setCursor(0, 1);
    lcd.print(" Humidity: " + String(data.humidity, 1) + "% ");
    lcd.print("Wokwi Online IoT");

    delay(1000);
}
```

OUTPUT:



A screenshot of a terminal window with a light gray background. The text is displayed in a monospaced font. It shows two identical sets of data separated by a blank line. Each set consists of three lines: a separator '---', a temperature reading 'Temp: 24.0°C', and a humidity reading 'Humidity: 40.0%'. At the bottom right of the terminal window, there are three icons: a line graph, a pause symbol, and a trash can.

```
---  
Temp: 24.0°C  
Humidity: 40.0%  
---  
Temp: 24.0°C  
Humidity: 40.0%  
---
```

SIMULATION LINK:

<https://wokwi.com/projects/378936628540765185>