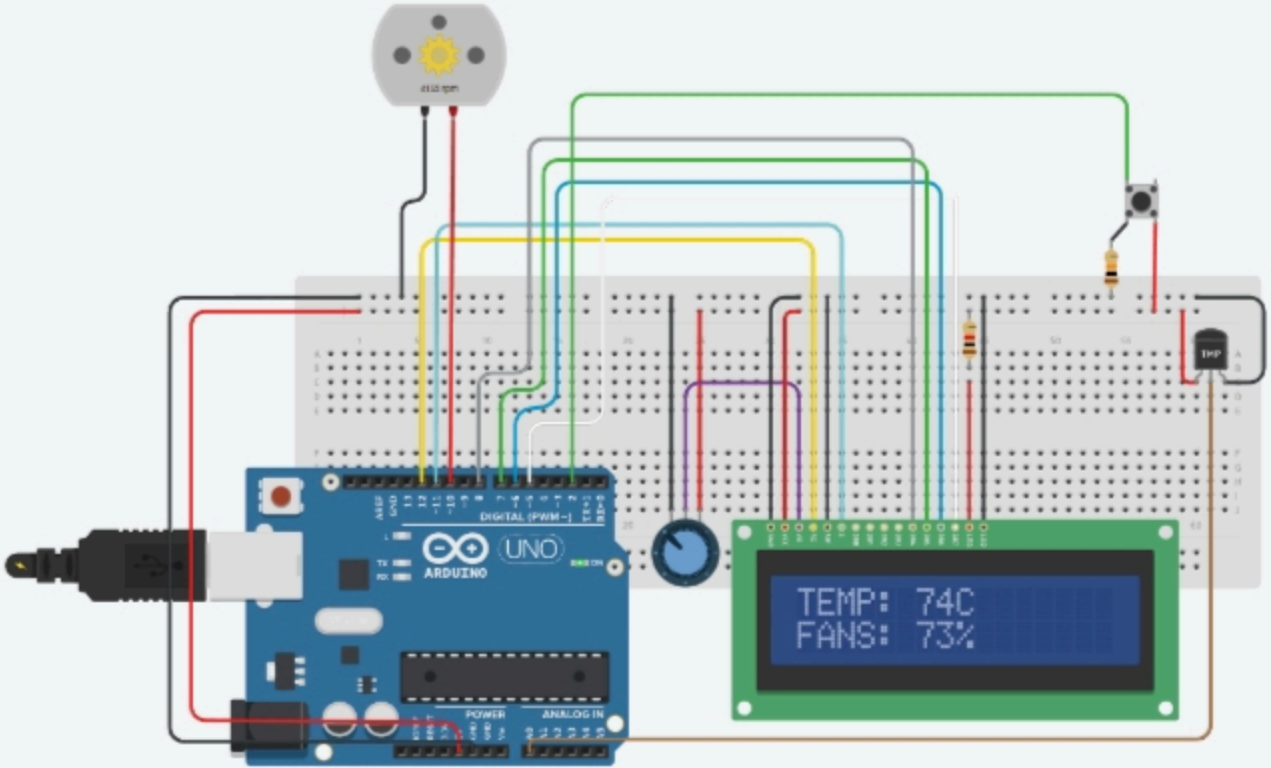
Copy of Temperature Controlled Fan*

All changes saved

Simulator time: 00:07:27

Code | Stop Simulation | Send To



Components
Basic

Search

Resistor | LED | Pushbutton

Potentiometer | Capacitor | Slideswitch

9V Battery | Coin Cell 3V Battery | 1.5V Battery

Breadboard Small | micro:bit | Arduino Uno R3

```
#include <LiquidCrystal.h>
LiquidCrystal lcd(12,11,8,7,6,5);
int tempPin = A0;
int fan = 10;
int led = 6;
int temp;
int tempMin = 30;
int tempMax = 90;
int fanSpeed;
int fanLCD;
int stop = 2;

void setup() {
  Serial.begin(9600);
  pinMode(fan, OUTPUT);
  pinMode(led, OUTPUT);
  pinMode(tempPin, INPUT);
  lcd.begin(16,2);

  pinMode(stop, INPUT_PULLUP);
  attachInterrupt (digitalPinToInterrupt (stop), stopfan, HIGH);
}

void loop() {
   temp = readTemp();
   if(temp  < tempMin) {
      fanSpeed = 0;
      digitalWrite(fan, LOW);
   }
   if((temp  >= tempMin) && (temp <= tempMax)) {
      fanSpeed = map(temp, tempMin, tempMax, 32, 255);
      fanLCD = map(temp, tempMin, tempMax, 0, 100);
      analogWrite(fan, fanSpeed);
```

```
    if(temp  > tempMax) {
      digitalWrite(led, HIGH);
    } else {
      digitalWrite(led, LOW);
    }

    lcd.print("TEMP: ");
    lcd.print(temp);
    lcd.print("C ");
    lcd.setCursor(0,1);
    lcd.print("FANS: ");
    lcd.print(fanLCD);
    lcd.print("%");
    delay(200);
    lcd.clear();


}

int readTemp() {
  temp = analogRead(tempPin);
  return temp * 0.48828125;
}

void stopfan () {
  lcd.clear();
  digitalWrite (fan, LOW);
  delayMicroseconds(900000000000000000000000);
  Serial.println("Mati");
  lcd.print("TEMP: --");
  lcd.setCursor(0,1);
  lcd.print("FANS: 0%");

}
```