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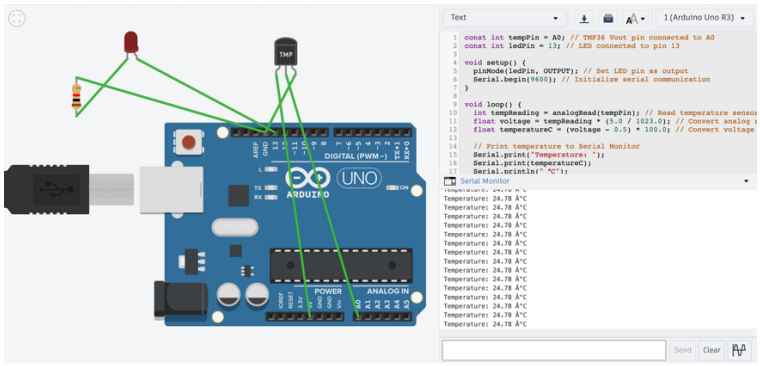
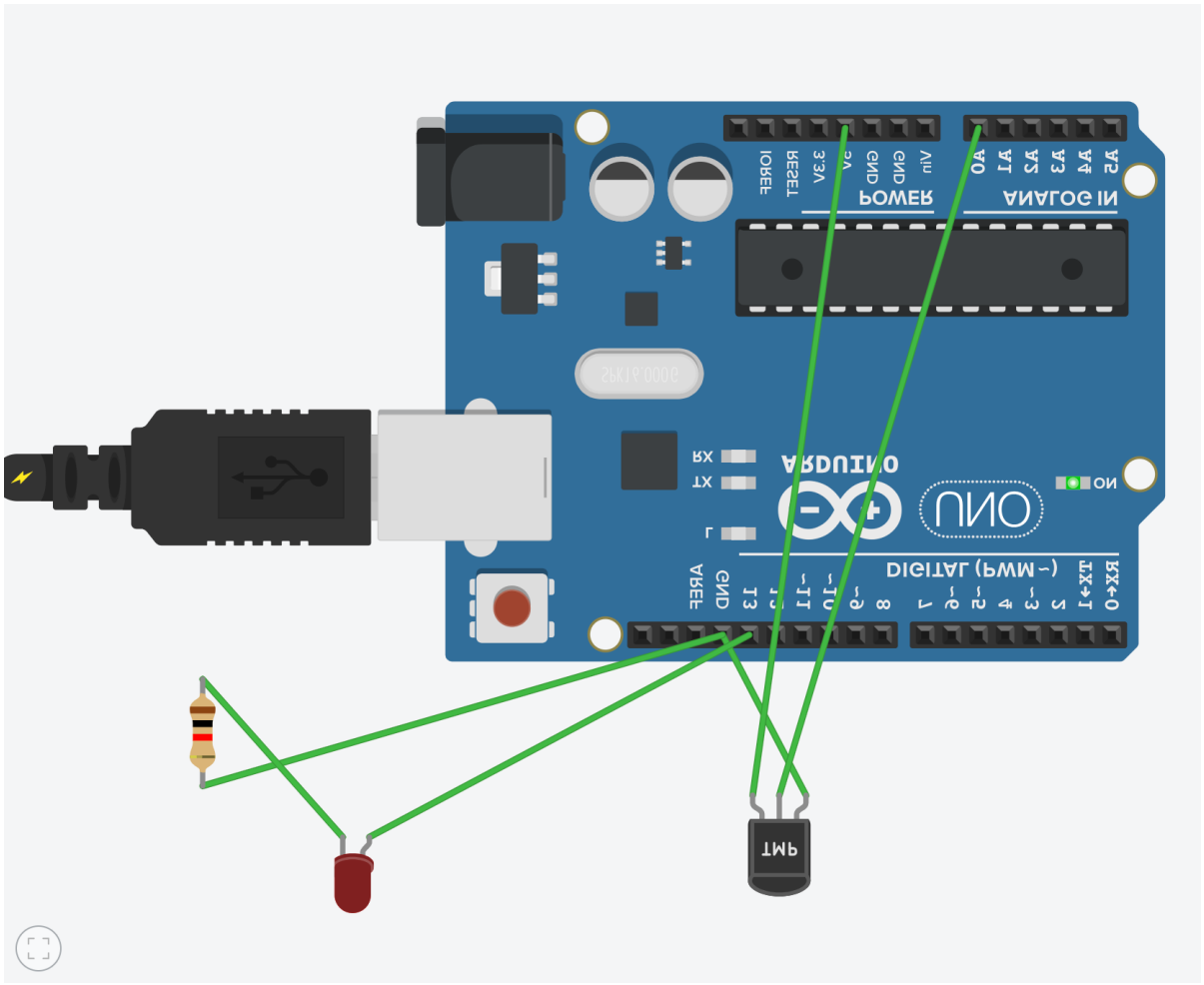
SIT315 - Simple Sense-Think-Act Board



Schematic Diagram:



Code and serial monitor:

Text

1 (Arduino Uno R3)

```
const int tempPin = A0; // TMP36 Vout pin connected to A0
const int ledPin = 13; // LED connected to pin 13

void setup() {
  pinMode(ledPin, OUTPUT); // Set LED pin as output
  Serial.begin(9600); // Initialize serial communication
}

void loop() {
  int tempReading = analogRead(tempPin); // Read temperature sensor
  float voltage = tempReading * (5.0 / 1023.0); // Convert analog r
  float temperatureC = (voltage - 0.5) * 100.0; // Convert voltage

  // Print temperature to Serial Monitor
  Serial.print("Temperature: ");
  Serial.print(temperatureC);
  Serial.println(" °C");
```

Serial Monitor

```
Temperature: 24.78 Â°C
Temperature: 24.78 Â°C
Temperature: 24.78 Â°C
Temperature: 24.78 Â°C
Temperature: 24.78 Â°C
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Temperature: 24.78 Â°C
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Temperature: 24.78 Â°C
```

Send Clear

Different temp and LED light on: