

Microprocessadores e Sistemas Embebidos

LAB 5

Leituras Analógicas no Arduino

Trabalho realizado por:

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Exercício 1

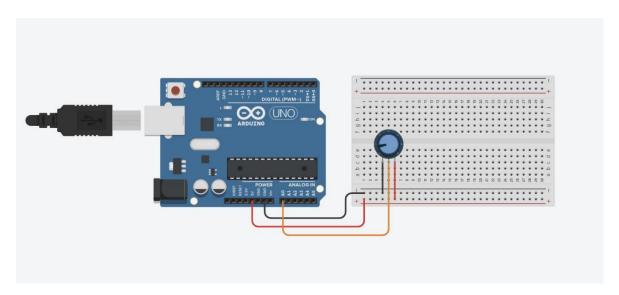


Figura 1-Circuito desenhado no ThinkerCAD

```
#define potPin 0
int valorPot = 0;

void setup()
{
    Serial.begin(9600);
}

void loop()
{
    valorPot = analogRead(potPin);
    Serial.println(valorPot);
    delay(100);
}
```

Figura 2-Circuito do exercício

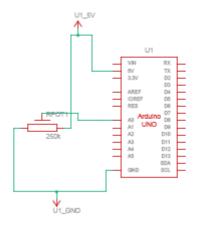


Figura 3-Diagrama do circuito

Exercício 2

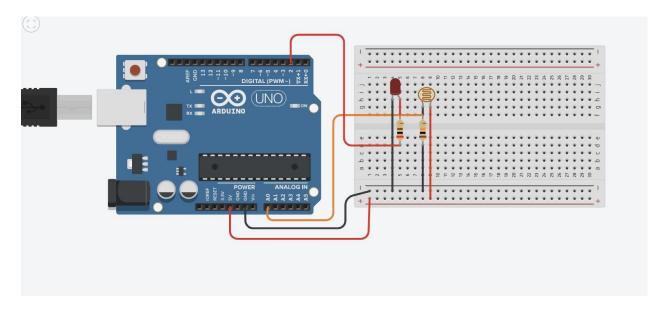


Figura 4-Circuito desenhado no ThinkerCAD

```
#define sensorPin 0
#define ledPin 2
int valorSensor = 0;

void setup()
{
   pinMode(ledPin, OUTPUT);
   Serial.begin(9600);
}

void loop()
{
   valorSensor = analogRead(sensorPin);
   Serial.println(valorSensor);

if(valorSensor<900){
   digitalWrite(ledPin, HIGH);
}else{
   digitalWrite(ledPin, LOW);
}
}</pre>
```

Figura 5-Circuito do exercício

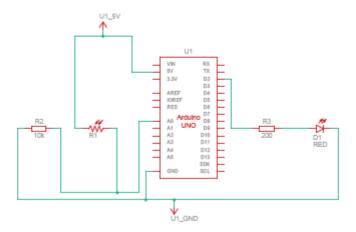


Figura 6-Diagrama do circuito