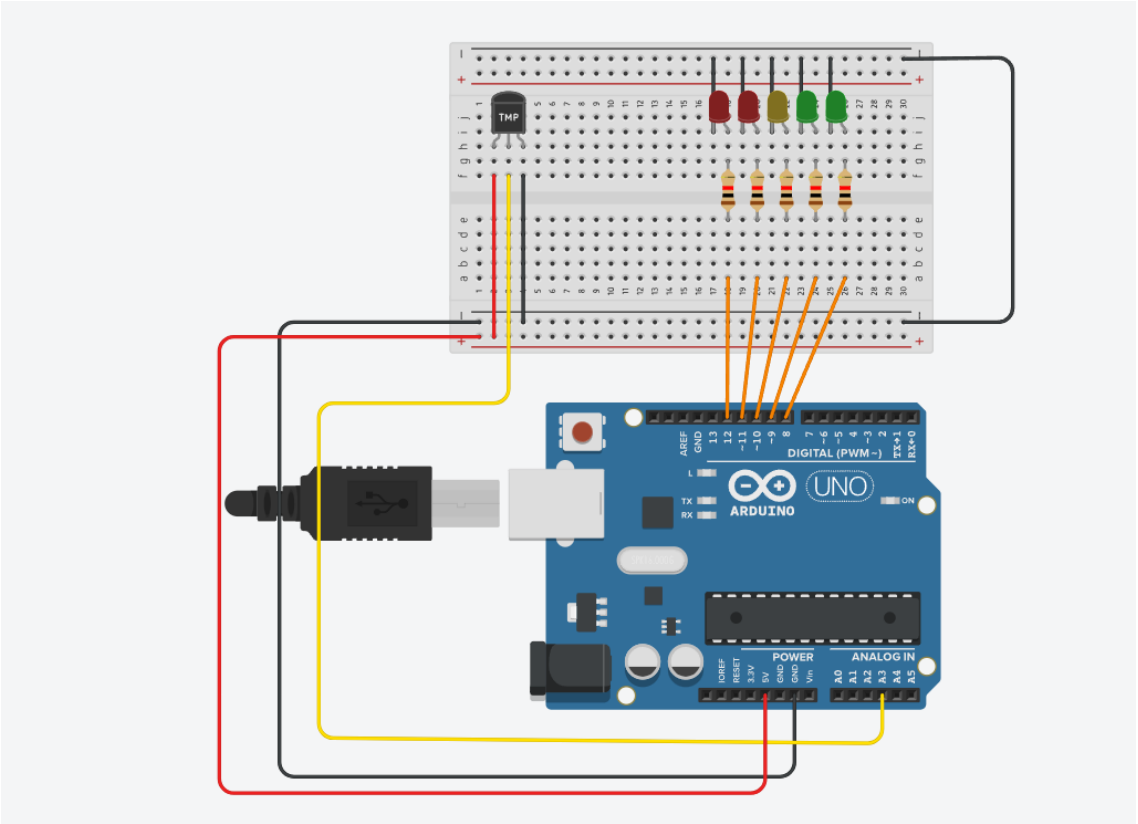
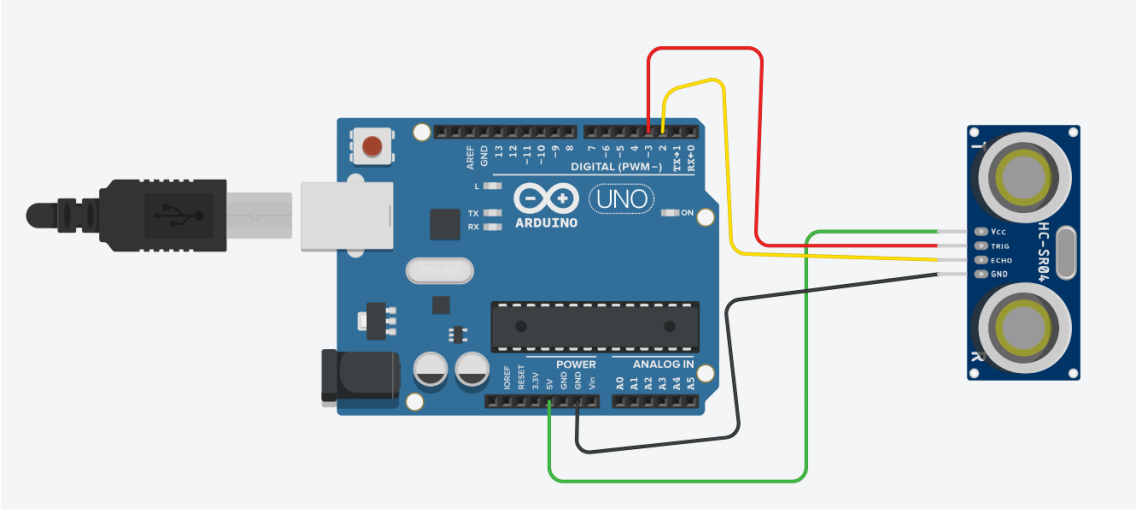
Atividade 3




```
int led_1;
void setup(){
 led_1 =13;
 pinMode(13,OUTPUT);
 Serial.begin(9600);
}
void loop()
{
  int sensorValue = analogRead(A3);
  float voltage = sensorValue * (5.0/1023.0);
  Serial.print("Tensao = ");
  Serial.print(voltage);
  Serial.print("V");
  Serial.println();
  delay(2000);
  float temp = (voltage-0.5)*100;
  Serial.print("Temperatura = ");
  Serial.print(temp);
  Serial.print("@C");
  Serial.println();

  if (temp >= -20){
    digitalWrite(8, HIGH);
  }else{digitalWrite(8, LOW);
  }

  if(temp >= 0){
    digitalWrite(9,HIGH);
  }else {digitalWrite(9, LOW);
  }

  if (temp >= 20){
    digitalWrite(10, HIGH);
  }else {digitalWrite(10, LOW);
  }

  if (temp >= 40){
    digitalWrite(11, HIGH);
  }else {digitalWrite(11, LOW);
  }

  if (temp >= 50){
    digitalWrite(12, HIGH);
  } else {digitalWrite(12, LOW);}
  delay(2000);}
```




```
float time = 0;
float distancia = 0;

void setup ()
{

pinMode (3, OUTPUT) ;
pinMode (2, INPUT);
Serial.begin (9600);
}
void loop ()
{
digitalWrite (3, LOW);
delayMicroseconds (2);
digitalWrite (3, HIGH);
delayMicroseconds (10);
time = pulseIn (2, HIGH) ;
Serial.println ("Tempo: " + String (time/1000) + "ms");
// time = microssegundos
distancia = time/1000000 * 170 * 100;
Serial.println ("Distancia: " + String (distancia) + "cm");
delay (10);
}
```