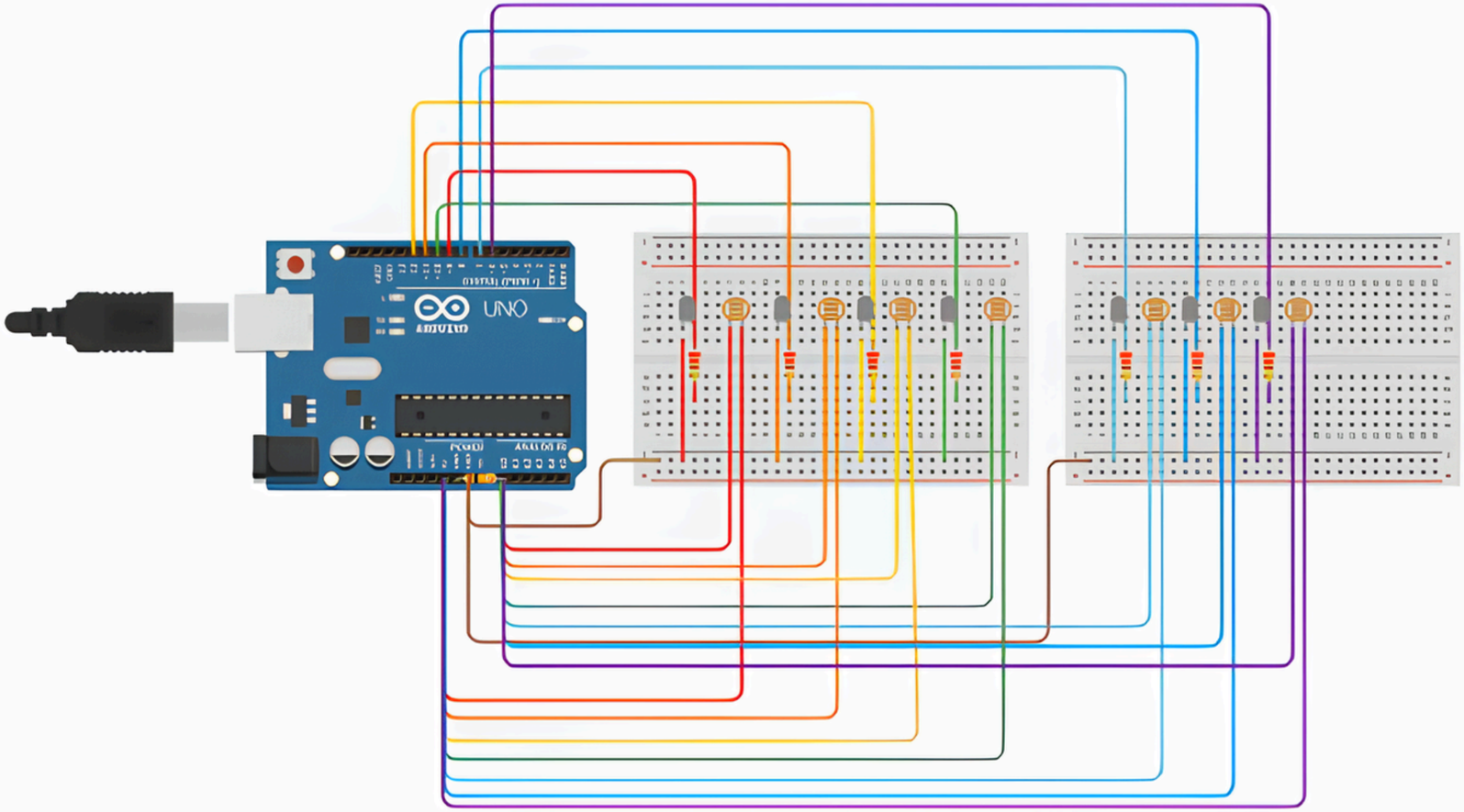
Sistema de iluminação inteligente

Descrição

- **sistema automatizado de iluminação**
- **detectar a luminosidade do ambiente e controlar o acionamento de luzes**

Maquete elétrica



```ino
int pinoLDR = A0;

int pinoLED1 = 9;
int pinoLED2 = 10;
int pinoLED3 = 11;
int pinoLED4 = 12;
int pinoLED5 = 7;
int pinoLED6 = 8;
int pinoLED7 = 6;

int limiteLuz = 300;

void setup(){

  pinMode(pinoLED1, OUTPUT);
  pinMode(pinoLED2, OUTPUT);
  pinMode(pinoLED3, OUTPUT);
  pinMode(pinoLED4, OUTPUT);
  pinMode(pinoLED5, OUTPUT);
  pinMode(pinoLED6, OUTPUT);
  pinMode(pinoLED7, OUTPUT);

}
```

```ino
void loop(){

  int valorLuz = analogRead(pinoLDR);

  if (valorLuz < limiteLuz){

    digitalWrite(pinoLED1, HIGH);
    digitalWrite(pinoLED2, HIGH);
    digitalWrite(pinoLED3, HIGH);
    digitalWrite(pinoLED4, HIGH);
    digitalWrite(pinoLED5, HIGH);
    digitalWrite(pinoLED6, HIGH);
    digitalWrite(pinoLED7, HIGH);

  } else{

    digitalWrite(pinoLED1, LOW);
    digitalWrite(pinoLED2, LOW);
    digitalWrite(pinoLED3, LOW);
    digitalWrite(pinoLED4, LOW);
    digitalWrite(pinoLED5, LOW);
    digitalWrite(pinoLED6, LOW);
    digitalWrite(pinoLED7, LOW);

  }

  delay(100);
}
```

Fim