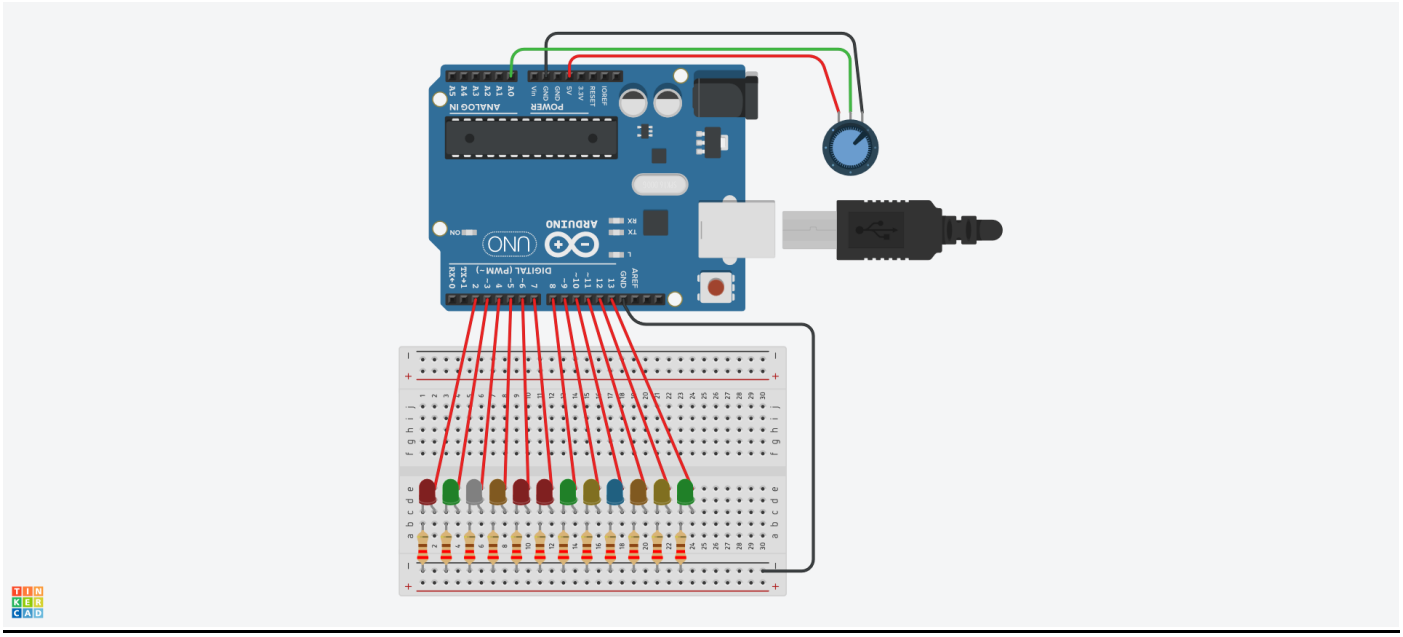
Pràctica-5: SincroLlum

Canvia nivells iluminació, segons la regulació



Programació:

```
// these constants won't change:
const int analogPin = A0;   // the pin that the potentiometer is attached to
const int ledCount = 12;    // the number of LEDs in the bar graph
int ledPins[] = {2, 3, 4, 5, 6, 7, 8, 9, 10, 11,12,13};   // an array of pin numbers to which LEDs are attached

void setup() {
 // loop over the pin array and set them all to output:
 for (int thisLed = 0; thisLed < ledCount; thisLed++) {
   pinMode(ledPins[thisLed], OUTPUT);
 }
 Serial.begin(9600);
}

void loop() {
 // read the potentiometer:
 int sensorReading = analogRead(analogPin);
 // map the result to a range from 0 to the number of LEDs:
 int ledLevel = map(sensorReading, 0, 1023, 0, ledCount);

 // loop over the LED array:
 for (int thisLed = 0; thisLed < ledCount; thisLed++) {
   // if the array element's index is less than ledLevel,
   // turn the pin for this element on:
   if (thisLed < ledLevel) {
     digitalWrite(ledPins[thisLed], HIGH);
   }
   // turn off all pins higher than the ledLevel:
   else {
     digitalWrite(ledPins[thisLed], LOW);
   }
 }
}
```