

IOT WITH AI LAB 6

SOURCE CODE:

```
const int redPotPin = A0;    // Potentiometer for red
const int greenPotPin = A1;  // Potentiometer for green
const int bluePotPin = A2;   // Potentiometer for blue

const int redLEDPin = 9;     // Red LED pin
const int greenLEDPin = 10;  // Green LED pin
const int blueLEDPin = 11;   // Blue LED pin

void setup() {

    pinMode(redLEDPin, OUTPUT);
    pinMode(greenLEDPin, OUTPUT);
    pinMode(blueLEDPin, OUTPUT);
}

void loop() {
    // Read the values from the potentiometers
    int redValue = analogRead(redPotPin);
    int greenValue = analogRead(greenPotPin);
    intmap blueValue = analogRead(bluePotPin);
```

```
// Map the potentiometer values (0-1023) to PWM values (0-255)

redValue = map(redValue, 0, 1023, 0, 255);
greenValue = map(greenValue, 0, 1023, 0, 255);
blueValue = map(blueValue, 0, 1023, 0, 255);


// Set the LED colors
analogWrite(redLEDPin, redValue);
analogWrite(greenLEDPin, greenValue);
analogWrite(blueLEDPin, blueValue);


// Small delay for stability
delay(10);
}
```

OUTPUT:

