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Name :- Vaishnavi Amar Kadam B-11
// Define the pins for the RGB LED
#define RED_LED 9
#define GREEN_LED 10
#define BLUE_LED 11

// Define the pins for the potentiometers
#define RED_POT A0
#define GREEN_POT A1
#define BLUE_POT A2

void setup() {
    pinMode(RED_LED, OUTPUT);
    pinMode(GREEN_LED, OUTPUT);
    pinMode(BLUE_LED, OUTPUT);
    Serial.begin(9600);
}

void loop() {
    int redValue = analogRead(RED_POT);
    int greenValue = analogRead(GREEN_POT);
    int blueValue = analogRead(BLUE_POT);

    // Map the potentiometer values from (0-1023) to (0-255) for PWM
    redValue = map(redValue, 0, 1023, 0, 255);
    greenValue = map(greenValue, 0, 1023, 0, 255);
    blueValue = map(blueValue, 0, 1023, 0, 255);

    // Set the LED brightness using PWM
    analogWrite(RED_LED, redValue);
    analogWrite(GREEN_LED, greenValue);
    analogWrite(BLUE_LED, blueValue);

    Serial.print("Red: "); Serial.print(redValue);
    Serial.print(" | Green: "); Serial.print(greenValue);
    Serial.print(" | Blue: "); Serial.println(blueValue);

    delay(100);
}
```


