// Define pin numbers for LEDs

const int greenLedPin = 9;

const int yellowLedPin = 10;

const int redLedPin = 11;

void setup() {

// Initialize serial communication at 9600 baud rate

Serial.begin(9600);

// Set LED pins as outputs

pinMode(greenLedPin, OUTPUT);

pinMode(yellowLedPin, OUTPUT);

pinMode(redLedPin, OUTPUT);

// Prompt the user for input

Serial.println("Please enter 'B' to blink the green LED, 'G' for green, 'Y' for yellow, or 'R' for red:");

}

void loop() {

// Check if there's incoming serial data

while (Serial.available() > 0) {

// Read the incoming byte

char input = Serial.read();

// Control LEDs based on user input

if (input == 'B' || input == 'b') {

// Blink the green LED

blinkLed(greenLedPin);

} else if (input == 'G' || input == 'g') {

// Turn on the green LED

digitalWrite(greenLedPin, HIGH);

digitalWrite(yellowLedPin, LOW);

digitalWrite(redLedPin, LOW);

} else if (input == 'Y' || input == 'y') {

// Turn on the yellow LED

digitalWrite(greenLedPin, LOW);

digitalWrite(yellowLedPin, HIGH);

digitalWrite(redLedPin, LOW);

} else if (input == 'R' || input == 'r') {

// Turn on the red LED

digitalWrite(greenLedPin, LOW);

digitalWrite(yellowLedPin, LOW);

digitalWrite(redLedPin, HIGH);

}

}

}

// Function to blink an LED

void blinkLed(int pin) {

digitalWrite(pin, HIGH);

delay(500);

digitalWrite(pin, LOW);

delay(500);

}