// Declare variables to represent pins and parameters

int bt1 = 1; // Button 1 is connected to pin 1

int bt2 = 2; // Button 2 is connected to pin 2

int ledG = 5; // Green LED is connected to pin 5

int ledR = 8; // Red LED is connected to pin 8

int ibt1 = 0; // ibt1 will be used to store the value of Button 1 (initialized as 0)

int ibt2 = 0; // ibt2 will be used to store the value of Button 2 (initialized as 0)

int a = 600; // Parameter a is calculated as the first letter of (Name \* 100) = 6 \* 100 = 600

int b = 1100; // Parameter b is calculated as the second letter of (Name\* 100)= 11 \* 100 = 1100

int c = 5; // Parameter c is calculated as the third letter of (Name + 4) = 1 + 4 = 5

int d = 2000; // Parameter d is calculated as the fourth letter of (Name\* 500) = 4 \* 500 = 2000

void setup() {

// Set the pinMode for the pins

pinMode(bt1, INPUT); // Set Button 1 as an input

pinMode(bt2, INPUT); // Set Button 2 as an input

pinMode(ledG, OUTPUT); // Set the Green LED as an output

pinMode(ledR, OUTPUT); // Set the Red LED as an output

}

void loop() {

// Get the values from Button 1 and Button 2

ibt1 = digitalRead(bt1); // Store the value of Button 1 in the variable ibt1

ibt2 = digitalRead(bt2); // Store the value of Button 2 in the variable ibt2

// If Button 1 is pressed, turn off both LEDs

if (ibt1 == HIGH) {

digitalWrite(ledG, LOW); // Turn off the Green LED

digitalWrite(ledR, LOW); // Turn off the Red LED

}

else {

// If Button 2 is not pressed, create a flashing pattern with the Green LED

if (ibt2 == LOW) {

digitalWrite(ledR, HIGH); // Turn on the Red LED

delay(50);

digitalWrite(ledR, LOW); // Turn off the Red LED

// Create a flashing pattern with the Green LED using parameters a, b, and c

for (int i = 0; i < c; i++) {

digitalWrite(ledG, HIGH); // Turn on the Green LED

delay(a=a+(i\*50)); // Wait for the specified amount of time (parameter a)

digitalWrite(ledG, LOW); // Turn off the Green LED

delay(b); // Wait for the specified amount of time (parameter b)

}

digitalWrite(ledG, LOW); // Turn off the Green LED

delay(d); // Wait for the specified amount of time (parameter d)

}

// If Button 2 is pressed, create a different flashing pattern with the Green LED

else {

digitalWrite(ledR, HIGH); // Turn on the Red LED

delay(50);

digitalWrite(ledR, LOW); // Turn off the Red LED

for(int i =0; i<c-3;i++)  
 {  
 digitalWrite(ledG, HIGH); // Turn on the Green LED  
 delay(a=a+(i\*50));  
 digitalWrite(ledG, LOW); // Turn off the Green LED  
 delay(b);  
   
 }  
  
 digitalWrite(ledG, LOW);  
 delay(d);  
  
  
 }

}  
  
}