const int button1Pin = 2;

const int ledPin1 = 10;

const int ledPin2 = 11;

const int ledPin3 = 12;

const int ledPin4 = 13;

void setup()

{

 pinMode(button1Pin, INPUT);

 pinMode(ledPin1, OUTPUT);

 pinMode(ledPin2, OUTPUT);

 pinMode(ledPin3, OUTPUT);

 pinMode(ledPin4, OUTPUT);

}

void loop()

{

 int button1State; // variables to hold the pushbutton states

 button1State = digitalRead(button1Pin);

 if (button1State == LOW)

 {

// First series of light flashes

 digitalWrite(ledPin1, HIGH);

 delay (75);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (75);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (75);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (75);

 digitalWrite(ledPin4, LOW);

 delay (1000);

 digitalWrite(ledPin1, HIGH);

 delay (75);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (75);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (75);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (75);

 digitalWrite(ledPin4, LOW);

 delay (1000);

 digitalWrite(ledPin1, HIGH);

 delay (75);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (75);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (75);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (75);

 digitalWrite(ledPin4, LOW);

 delay (1000);

// Second Series of Flashes

 digitalWrite(ledPin1, HIGH);

 delay (75);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (75);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (75);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (75);

 digitalWrite(ledPin4, LOW);

 delay (500);

 digitalWrite(ledPin1, HIGH);

 delay (75);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (75);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (75);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (75);

 digitalWrite(ledPin4, LOW);

 delay (500);

 digitalWrite(ledPin1, HIGH);

 delay (75);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (75);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (75);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (75);

 digitalWrite(ledPin4, LOW);

 delay (500);

// Third set of flashes

 digitalWrite(ledPin1, HIGH);

 delay (75);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (75);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (75);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (75);

 digitalWrite(ledPin4, LOW);

 delay (250);

 digitalWrite(ledPin1, HIGH);

 delay (50);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (50);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (50);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (50);

 digitalWrite(ledPin4, LOW);

 delay (250);

 digitalWrite(ledPin1, HIGH);

 delay (50);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (50);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (50);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (50);

 digitalWrite(ledPin4, LOW);

 delay (250);

 digitalWrite(ledPin1, HIGH);

 delay (50);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (50);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (50);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (50);

 digitalWrite(ledPin4, LOW);

 delay (250);

// Forth Set of flashes

 digitalWrite(ledPin1, HIGH);

 delay (50);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (50);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (50);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (50);

 digitalWrite(ledPin4, LOW);

 delay (125);

 digitalWrite(ledPin1, HIGH);

 delay (50);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (50);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (50);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (50);

 digitalWrite(ledPin4, LOW);

 delay (125);

 digitalWrite(ledPin1, HIGH);

 delay (50);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (50);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (50);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (50);

 digitalWrite(ledPin4, LOW);

 delay (125);

// Fifth Set of flashes

 digitalWrite(ledPin1, HIGH);

 delay (40);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (40);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (40);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (40);

 digitalWrite(ledPin4, LOW);

 delay (80);

 digitalWrite(ledPin1, HIGH);

 delay (40);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (40);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (40);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (40);

 digitalWrite(ledPin4, LOW);

 delay (80);

 digitalWrite(ledPin1, HIGH);

 delay (40);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (40);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (40);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (40);

 digitalWrite(ledPin4, LOW);

 delay (80);

 digitalWrite(ledPin1, HIGH);

 delay (40);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (40);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (40);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (40);

 digitalWrite(ledPin4, LOW);

 delay (80);

 digitalWrite(ledPin1, HIGH);

 delay (40);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (40);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (40);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (40);

 digitalWrite(ledPin4, LOW);

 delay (80);

 digitalWrite(ledPin1, HIGH);

 delay (40);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (40);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (40);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (40);

 digitalWrite(ledPin4, LOW);

 delay (80);

 digitalWrite(ledPin1, HIGH);

 delay (40);

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, HIGH);

 delay (40);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, HIGH);

 delay (40);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, HIGH);

 delay (40);

 digitalWrite(ledPin4, LOW);

 delay (80);

//Flash out

 digitalWrite(ledPin4, HIGH);

 digitalWrite(ledPin3, HIGH);

 digitalWrite(ledPin2, HIGH);

 digitalWrite(ledPin1, HIGH);

 delay (150);

 digitalWrite(ledPin4, LOW);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin1, LOW);

 delay (60);

 digitalWrite(ledPin4, HIGH);

 digitalWrite(ledPin3, HIGH);

 digitalWrite(ledPin2, HIGH);

 digitalWrite(ledPin1, HIGH);

 delay (150);

 digitalWrite(ledPin4, LOW);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin1, LOW);

 delay (60);

 digitalWrite(ledPin4, HIGH);

 digitalWrite(ledPin3, HIGH);

 digitalWrite(ledPin2, HIGH);

 digitalWrite(ledPin1, HIGH);

 delay (150);

 digitalWrite(ledPin4, LOW);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin1, LOW);

 delay (60);

 digitalWrite(ledPin4, HIGH);

 digitalWrite(ledPin3, HIGH);

 digitalWrite(ledPin2, HIGH);

 digitalWrite(ledPin1, HIGH);

 delay (150);

 digitalWrite(ledPin4, LOW);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin1, LOW);

 delay (60);

 digitalWrite(ledPin4, HIGH);

 digitalWrite(ledPin3, HIGH);

 digitalWrite(ledPin2, HIGH);

 digitalWrite(ledPin1, HIGH);

 delay (150);

 digitalWrite(ledPin4, LOW);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin1, LOW);

 delay (60);

 digitalWrite(ledPin4, HIGH);

 digitalWrite(ledPin3, HIGH);

 digitalWrite(ledPin2, HIGH);

 digitalWrite(ledPin1, HIGH);

 delay (150);

 digitalWrite(ledPin4, LOW);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin1, LOW);

 delay (60);

 digitalWrite(ledPin4, HIGH);

 digitalWrite(ledPin3, HIGH);

 digitalWrite(ledPin2, HIGH);

 digitalWrite(ledPin1, HIGH);

 delay (150);

 digitalWrite(ledPin4, HIGH);

 digitalWrite(ledPin3, HIGH);

 digitalWrite(ledPin2, HIGH);

 digitalWrite(ledPin1, HIGH);

 delay (3000);

 digitalWrite(ledPin4, LOW);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin1, LOW);

}

 else

 {

 digitalWrite(ledPin1, LOW);

 digitalWrite(ledPin2, LOW);

 digitalWrite(ledPin3, LOW);

 digitalWrite(ledPin4, LOW);

}}