**Lab02程式碼**

**Check Point 2**

**int i;**

**const byte led[] = {13, 12, 11, 10, 9, 8, 7, 6};**

**void setup() {**

**for(i=0;i<8;i++) {**

**pinMode(led[i],OUTPUT);**

**digitalWrite(led[i],LOW);**

**}**

**}**

**void loop() {**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],LOW);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],LOW);**

**}**

**delay(1000);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**delay(300);**

**digitalWrite(led[i],LOW);**

**}**

**delay(1000);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],LOW);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],LOW);**

**}**

**delay(1000);**

**for(i=7;i>=0;i--) {**

**digitalWrite(led[i],HIGH);**

**delay(300);**

**digitalWrite(led[i],LOW);**

**}**

**delay(1000);**

**}**

**Check Point 3**

**int i;**

**boolean val;**

**const byte led[] = {13, 12, 11, 10, 9, 8, 7, 6};**

**const byte sw = 4;**

**void setup() {**

**for(i=0;i<8;i++) {**

**pinMode(led[i], OUTPUT);**

**digitalWrite(led[i],LOW);**

**}**

**pinMode(sw, INPUT);**

**}**

**void loop() {**

**val = digitalRead(sw);**

**if(val) {**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],LOW);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],LOW);**

**}**

**delay(1000);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**delay(300);**

**digitalWrite(led[i],LOW);**

**}**

**delay(1000);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],LOW);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**}**

**delay(500);**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],LOW);**

**}**

**delay(1000);**

**for(i=7;i>=0;i--) {**

**digitalWrite(led[i],HIGH);**

**delay(300);**

**digitalWrite(led[i],LOW);**

**}**

**delay(1000);**

**}**

**else {**

**for(i=0;i<8;i++) {**

**digitalWrite(led[i],HIGH);**

**delay(300);**

**digitalWrite(led[i],LOW);**

**}**

**delay(1000);**

**for(i=7;i>=0;i--) {**

**digitalWrite(led[i],HIGH);**

**delay(300);**

**digitalWrite(led[i],LOW);**

**}**

**}**

**}**