//Pat McMahon 18/10/2018

//

//A024-Rock n Roll Marble Machine

//Servo connected to D9

//Green LEDs connected to D3

//Red LEDs connected to D4

//White LEDs connected to D5

//Blue LEDs connected to D6

#include <Servo.h>

const int kPinLed1 = 3;

const int kPinLed2 = 4;

const int kPinLed3 = 5;

const int kPinLed4 = 6;

int delayTime=200;

// define servos

 Servo ServoCentre;

//servo position in degrees

 int ServoPos=90;

void setup() {

 // define servo signal inputs (digital pwm 9,10,11)

 ServoCentre.attach(9);

 pinMode(kPinLed1, OUTPUT);

 pinMode(kPinLed2, OUTPUT);

 pinMode(kPinLed3, OUTPUT);

 pinMode(kPinLed4, OUTPUT);

}

void loop() {

 // turn on each of the LEDs in order

 {digitalWrite(kPinLed1, HIGH);

 delay(delayTime);

 digitalWrite(kPinLed2, HIGH);

 delay(delayTime);

 digitalWrite(kPinLed3, HIGH);

 delay(delayTime);

 digitalWrite(kPinLed4, HIGH);

 delay(delayTime);

 // turn off each of the LEDs in order

 digitalWrite(kPinLed1, LOW);

 delay(delayTime);

 digitalWrite(kPinLed2, LOW);

 delay(delayTime);

 digitalWrite(kPinLed3, LOW);

 delay(delayTime);

 digitalWrite(kPinLed4, LOW);

 delay(delayTime);

}

 ServoCentre.write(20);

 delay(1000);

 ServoCentre.write(150);

 delay(1000);

}