//Pat McMahon 3-2-2019, Modified 27/10/2022

//Electronic LED Dice

//A066- Pat's LED Dice & Button Shield

int pinLeds1 = 10;

int pinLeds2 = 9;

int pinLeds3 = 7;

int pinLed4 = 8;

int buttonPin = 6;

int buttonState;

long ran;

int time = 2000;

void setup ()

{

  pinMode (pinLeds1, OUTPUT);

  pinMode (pinLeds2, OUTPUT);

  pinMode (pinLeds3, OUTPUT);

  pinMode (pinLed4, OUTPUT);

  pinMode (buttonPin, INPUT);

  randomSeed(analogRead(0));

}

void loop()

{

  buttonState = digitalRead(buttonPin);

  if (buttonState == HIGH){

    ran = random(1, 7);

    if (ran == 1){

      digitalWrite (pinLed4, HIGH);

      delay (time);

    }

    if (ran == 2){

      digitalWrite (pinLeds1, HIGH);

      delay (time);

    }

    if (ran == 3){

      digitalWrite (pinLeds3, HIGH);

      digitalWrite (pinLed4, HIGH);

      delay (time);

    }

    if (ran == 4){

      digitalWrite (pinLeds1, HIGH);

      digitalWrite (pinLeds3, HIGH);

      delay (time);

    }

    if (ran == 5){

      digitalWrite (pinLeds1, HIGH);

      digitalWrite (pinLeds3, HIGH);

      digitalWrite (pinLed4, HIGH);

      delay (time);

   }

   if (ran == 6){

      digitalWrite (pinLeds1, HIGH);

      digitalWrite (pinLeds2, HIGH);

      digitalWrite (pinLeds3, HIGH);

      delay (time);

   }

  }

  digitalWrite (pinLeds1, LOW);

  digitalWrite (pinLeds2, LOW);

  digitalWrite (pinLeds3, LOW);

  digitalWrite (pinLed4, LOW);

}