/ Pat McMahon 4/10/2022

//A063- 7 Segment Display

//Uses a Jumbo 7 Segment Display

//Counts up & down Automatically at 1 Second intervals

int APin = 5;    // A pin of the LED to pin 5

int BPin = 6;    // B pin of the LED to pin 6

int CPin = 7;    // C pin of the LED to pin 7

int DPin = 8;    // D pin of the LED to pin 8

int EPin = 9;    // E pin of the LED to pin 9

int FPin = 10;   // F pin of the LED to pin 10

int GPin = 11;   // G pin of the LED to pin 11

int DelayTime=1000;

void setup() {

        pinMode(APin, OUTPUT);

        pinMode(BPin, OUTPUT);

        pinMode(CPin, OUTPUT);

        pinMode(DPin, OUTPUT);

        pinMode(EPin, OUTPUT);

        pinMode(FPin, OUTPUT);

        pinMode(GPin, OUTPUT);

}

void loop() {

{

        //  0 key

          Serial.println("Key 0");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, LOW);

         delay(DelayTime);

        // 1 key

        Serial.println("Key 1");

        digitalWrite(APin, LOW);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

        delay(DelayTime);

        // 2 key

        Serial.println("Key 2");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, LOW);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  3 key

        Serial.println("Key 3");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  4 key

         Serial.println("Key 4");

        digitalWrite(APin, LOW);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  5 key

         Serial.println("Key 5");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  6 key

          Serial.println("Key 6");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //    7 key

          Serial.println("Key 7");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

         delay(DelayTime);

        //  8 key

          Serial.println("Key 8");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  9 key

          Serial.println("Key 9");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

          //  - key

          Serial.println("Key 0");

        digitalWrite(APin, LOW);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, LOW);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  9 key

          Serial.println("Key 9");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

        //  8 key

          Serial.println("Key 8");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

         //    7 key

          Serial.println("Key 7");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

         delay(DelayTime);

         //  6 key

          Serial.println("Key 6");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

         //  5 key

         Serial.println("Key 5");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

         //  4 key

         Serial.println("Key 4");

        digitalWrite(APin, LOW);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

         //  3 key

        Serial.println("Key 3");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

         // 2 key

        Serial.println("Key 2");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, LOW);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

         delay(DelayTime);

          // 1 key

        Serial.println("Key 1");

        digitalWrite(APin, LOW);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, LOW);

        delay(DelayTime);

         //  0 key

          Serial.println("Key 0");

        digitalWrite(APin, HIGH);

        digitalWrite(BPin, HIGH);

        digitalWrite(CPin, HIGH);

        digitalWrite(DPin, HIGH);

        digitalWrite(EPin, HIGH);

        digitalWrite(FPin, HIGH);

        digitalWrite(GPin, LOW);

         delay(DelayTime);

          //  - key

          Serial.println("Key 0");

        digitalWrite(APin, LOW);

        digitalWrite(BPin, LOW);

        digitalWrite(CPin, LOW);

        digitalWrite(DPin, LOW);

        digitalWrite(EPin, LOW);

        digitalWrite(FPin, LOW);

        digitalWrite(GPin, HIGH);

        delay(DelayTime);

}

}