#include <bitreader.h>

#include <LedControl.h>

#include "LedControl.h"

#include "binary.h"

/\*

 DIN connects to pin 12

 CLK connects to pin 11

 CS connects to pin 10

\*/

LedControl lc=LedControl(12,11,10,1);

// delay time between numbers

unsigned long delaytime=1000;

//number 60

byte sixty[8]=

 { B11101110,

 B10001010,

 B10001010,

 B11101010,

 B10101010,

 B10101010,

 B10101010,

 B11101110};

//number 50

byte fifty[8]=

 { B00000000,

 B11101110,

 B10001010,

 B10001010,

 B11101010,

 B00101010,

 B00101010,

 B11101110};

//number 40

byte forty[8]=

 { B00000000,

 B10101110,

 B10101010,

 B10101010,

 B11101010,

 B00101010,

 B00101010,

 B00101110 };

//number 30

byte thirty[8]=

 { B00000000,

 B11101110,

 B00101010,

 B00101010,

 B11101010,

 B00101010,

 B00101010,

 B11101110};

//number 20

byte twenty[8]=

 { B00000000,

 B11101110,

 B00101010,

 B00101010,

 B11001010,

 B10001010,

 B10001010,

 B11101110};

//number 10

//10

byte ten[8]=

 {B00000000,

 B01011110,

 B01010010,

 B01010010,

 B01010010,

 B01010010,

 B01011110,

 B00000000};

//number 9

byte nine[8]=

{B00111100,

 B00100100,

 B00100100,

 B00111100,

 B00000100,

 B00000100,

 B00000100,

 B00011100};

//number 8

byte eight[8]=

{ B00011100,

 B00100100,

 B00100100,

 B00011000,

 B00100100,

 B00100100,

 B00100100,

 B00011000 };

//number 7

byte seven[8]=

 {B00111110,

 B00000110,

 B00001100,

 B00011000,

 B00110000,

 B00110000,

 B00110000,

 B00000000};

//number 6

byte six[8]=

 {B00111000,

 B00100000,

 B00100000,

 B00111100,

 B00100100,

 B00100100,

 B00100100,

 B00111100};

//number 5

byte five[8]=

{B00111100,

 B00100000,

 B00100000,

 B00111100,

 B00000100,

 B00000100,

 B01000100,

 B00111100};

//number 4

byte four[8]=

 { B00000000,

 B00000100,

 B00001100,

 B00010100,

 B00111110,

 B00000100,

 B00000100,

 B00000000};

//number 3

byte three[8]=

 {B00111000,

 B00000100,

 B00000100,

 B00111000,

 B00000100,

 B00000100,

 B00111000,

 B00000000};

//number2

 byte two[8]=

{ B00011000,

 B00100100,

 B00000100,

 B00001000,

 B00010000,

 B00100000,

 B00111100,

 B00000000};

//number 1

byte one[8]=

 {B00000000,

 B00010000,

 B00010000,

 B00010000,

 B00010000,

 B00010000,

 B00010000,

 B00000000};

 void setup() {

 lc.shutdown(0,false);

 // Set brightness to a medium value

 lc.setIntensity(0,8);

 // Clear the display

 lc.clearDisplay(0);

}

void drawNumbers(){

 // Display sixty

 lc.setRow(0,0, sixty [0]);

 lc.setRow(0,1, sixty[1]);

 lc.setRow(0,2, sixty [2]);

 lc.setRow(0,3, sixty[3]);

 lc.setRow(0,4, sixty [4]);

 lc.setRow(0,5, sixty[5]);

 lc.setRow(0,6, sixty [6]);

 lc.setRow(0,7, sixty [7]);

 delay(10000);

 // Display fifty

 lc.setRow(0,0, fifty [0]);

 lc.setRow(0,1, fifty [1]);

 lc.setRow(0,2,fifty[2 ]);

 lc.setRow(0,3, fifty [3]);

 lc.setRow(0,4, fifty [4]);

 lc.setRow(0,5, fifty [5]);

 lc.setRow(0,6, fifty [6]);

 lc.setRow(0,7, fifty [7]);

 delay(10000);

 // Display forty

 lc.setRow(0,0, forty [0]);

 lc.setRow(0,1, forty [1]);

 lc.setRow(0,2,forty[2]);

 lc.setRow(0,3, forty [3]);

 lc.setRow(0,4, forty [4]);

 lc.setRow(0,5, forty[5]);

 lc.setRow(0,6, forty[6]);

 lc.setRow(0,7, forty [7]);

 delay(10000);

 // Display thirty

 lc.setRow(0,0, thirty [0]);

 lc.setRow(0,1,thirty [1]);

 lc.setRow(0,2, thirty [2]);

 lc.setRow(0,3, thirty [3]);

 lc.setRow(0,4, thirty [4]);

 lc.setRow(0,5, thirty [5]);

 lc.setRow(0,6, thirty [6]);

 lc.setRow(0,7, thirty [7]);

 delay(10000);

 // Display twenty

 lc.setRow(0,0, twenty [0]);

 lc.setRow(0,1,twenty [1]);

 lc.setRow(0,2,twenty [2]);

 lc.setRow(0,3, twenty [3]);

 lc.setRow(0,4,twenty [4]);

 lc.setRow(0,5, twenty [5]);

 lc.setRow(0,6,twenty [6]);

 lc.setRow(0,7, twenty [7]);

 delay(10000);

//Display ten

 lc.setRow(0,0,ten[0]);

 lc.setRow(0,1,ten[1]);

 lc.setRow(0,2,ten[2]);

 lc.setRow(0,3,ten[3]);

 lc.setRow(0,4,ten[4]);

 lc.setRow(0,5,ten[5]);

 lc.setRow(0,6,ten[6]);

 lc.setRow(0,7,ten[7]);

 delay(1000);

 //Display nine

 lc.setRow(0,0,nine[0]);

 lc.setRow(0,1,nine[1]);

 lc.setRow(0,2,nine[2]);

 lc.setRow(0,3,nine[3]);

 lc.setRow(0,4,nine[4]);

 lc.setRow(0,5,nine[5]);

 lc.setRow(0,6,nine[6]);

 lc.setRow(0,7,nine[7]);

 delay(1000);

//Display eight

 lc.setRow(0,0,eight[0]);

 lc.setRow(0,1,eight[1]);

 lc.setRow(0,2,eight[2]);

 lc.setRow(0,3,eight[3]);

 lc.setRow(0,4,eight[4]);

 lc.setRow(0,5,eight[5]);

 lc.setRow(0,6,eight[6]);

 lc.setRow(0,7,eight[7]);

 delay(1000);

//Display seven

 lc.setRow(0,0,seven[0]);

 lc.setRow(0,1,seven[1]);

 lc.setRow(0,2,seven[2]);

 lc.setRow(0,3,seven[3]);

 lc.setRow(0,4,seven[4]);

 lc.setRow(0,5,seven[5]);

 lc.setRow(0,6,seven[6]);

 lc.setRow(0,7,seven[7]);

 delay(1000);

 // Display six

 lc.setRow(0,0,six[0]);

 lc.setRow(0,1,six[1]);

 lc.setRow(0,2,six[2]);

 lc.setRow(0,3,six[3]);

 lc.setRow(0,4,six[4]);

 lc.setRow(0,5,six[5]);

 lc.setRow(0,6,six[6]);

 lc.setRow(0,7,six[7]);

 delay(1000);

 // Display five

 lc.setRow(0,0,five[0]);

 lc.setRow(0,1,five[1]);

 lc.setRow(0,2,five[2]);

 lc.setRow(0,3,five[3]);

 lc.setRow(0,4,five[4]);

 lc.setRow(0,5,five[5]);

 lc.setRow(0,6,five[6]);

 lc.setRow(0,7,five[7]);

 delay(1000);

 // Display four

 lc.setRow(0,0,four[0]);

 lc.setRow(0,1,four[1]);

 lc.setRow(0,2,four[2]);

 lc.setRow(0,3,four[3]);

 lc.setRow(0,4,four[4]);

 lc.setRow(0,5,four[5]);

 lc.setRow(0,6,four[6]);

 lc.setRow(0,7,four[7]);

 delay(1000);

 // Display three

 lc.setRow(0,0,three[0]);

 lc.setRow(0,1,three[1]);

 lc.setRow(0,2,three[2]);

 lc.setRow(0,3,three[3]);

 lc.setRow(0,4,three[4]);

 lc.setRow(0,5,three[5]);

 lc.setRow(0,6,three[6]);

 lc.setRow(0,7,three[7]);

 delay(1000);

 // Display two

 lc.setRow(0,0,two[0]);

 lc.setRow(0,1,two[1]);

 lc.setRow(0,2,two[2]);

 lc.setRow(0,3,two[3]);

 lc.setRow(0,4,two[4]);

 lc.setRow(0,5,two[5]);

 lc.setRow(0,6,two[6]);

 lc.setRow(0,7,two[7]);

 delay(delaytime);

 // Display one

 lc.setRow(0,0,one[0]);

 lc.setRow(0,1,one[1]);

 lc.setRow(0,2,one[2]);

 lc.setRow(0,3,one[3]);

 lc.setRow(0,4,one[4]);

 lc.setRow(0,5,one[5]);

 lc.setRow(0,6,one[6]);

 lc.setRow(0,7,one[7]);

 delay(1080);

}

void loop(){

 drawNumbers();

}