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/*
   This program is to test Led dot matrix Display interfacing with
Arduino

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                 12 - June - 2019

   Connect VCC of Led dot matrix display to +5V of Arduino board
   Connect GND of Led dot matrix display to GND of Arduino board
   Connect Clock of Led dot matrix display to 11 pin of Arduino board
   Connect Cs of Led dot matrix display to 12 pin of Arduino board
   Connect Din of Led dot matrix display to 13 pin of Arduino board

   Upload the code and check in Serial Monitor.
*/

#include <LedControl.h>         // Library for Dot Matrix LED control

int DIN = 13;                   // Arduino Digital Pin's used for LED
Matrix
int CS =  12;
int CLK = 11;

byte Patter[8] = { 0B01010101,
                   0B10101010,
                   0B01010101,


}

byte E[8] = {0x3C, 0x20, 0x20, 0x3C, 0x20, 0x20, 0x20, 0x3C};
byte L[8] = {0x20, 0x20, 0x20, 0x20, 0x20, 0x20, 0x20, 0x3E};
byte C[8] = {0x1C, 0x20, 0x20, 0x20, 0x20, 0x20, 0x20, 0x1C};
byte T[8] = {0x7C, 0x10, 0x10, 0x10, 0x10, 0x10, 0x10, 0x10};
//Declaring Hex number of Character to be printed
byte R[8] = {0x38, 0x24, 0x24, 0x28, 0x30, 0x28, 0x24, 0x24};
byte O[8] = {0x1C, 0x22, 0x22, 0x22, 0x22, 0x22, 0x22, 0x1C};
byte N[8] = {0x42, 0x62, 0x52, 0x52, 0x4A, 0x46, 0x46, 0x42};
byte I[8] = {0x38, 0x10, 0x10, 0x10, 0x10, 0x10, 0x10, 0x38};
byte S[8] = {0x1C, 0x20, 0x20, 0x10, 0x08, 0x04, 0x04, 0x38};
byte H[8] = {0x22, 0x22, 0x22, 0x3E, 0x22, 0x22, 0x22, 0x22};
byte U[8] = {0x22, 0x22, 0x22, 0x22, 0x22, 0x22, 0x22, 0x1C,};
byte B[8] = {0x38, 0x24, 0x24, 0x38, 0x38, 0x24, 0x24, 0x38};
byte smile[8] =   {0x3C, 0x42, 0xA5, 0x81, 0xA5, 0x99, 0x42, 0x3C};
byte neutral[8] = {0x3C, 0x42, 0xA5, 0x81, 0xBD, 0x81, 0x42, 0x3C};
byte frown[8] =   {0x3C, 0x42, 0xA5, 0x81, 0x99, 0xA5, 0x42, 0x3C};

LedControl led = LedControl(DIN, CLK, CS, 1);   //Creating led object
using declared Pins

void setup()
{
  led.shutdown(0, false);                     // Turn LED register ON
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  led.setIntensity(0, 5);                     // Set Intensity of LED
materix
  led.clearDisplay(0);                        //Clearing the LED matrix
Display
}

void loop()
{
  printByte(smile);     // Prints one by one charectors created above
  delay(1000);

  printByte(neutral);
  delay(1000);

  printByte(frown);
  delay(1000);

  printByte(E);
  delay(1000);

  printByte(L);
  delay(1000);

  printByte(E);
  delay(1000);

  printByte(C);
  delay(1000);

  printByte(T);
  delay(1000);

  printByte(R);
  delay(1000);

  printByte(O);
  delay(1000);

  printByte(N);
  delay(1000);

  printByte(I);
  delay(1000);

  printByte(C);
  delay(1000);

  printByte(S);
  delay(1000);

  led.clearDisplay(0);
  delay(1000);

  printByte(H);
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  delay(1000);

  printByte(U);
  delay(1000);

  printByte(B);
  delay(1000);


  lc.clearDisplay(0);
  delay(1000);
}

// This fuction helps to send data to be printed on LED matrix
void printByte(byte character [])
{
  int i = 0;
  for (i = 0; i < 8; i++)
  {
    led.setRow(0, i, character[i]);
  }
}
```