unsigned short kp = 0;

// Keypad module connections

char keypadPort at PORTD;

// End Keypad module connections

// LCD module connections

sbit LCD\_RS at RB4\_bit;

sbit LCD\_EN at RB5\_bit;

sbit LCD\_D4 at RB0\_bit;

sbit LCD\_D5 at RB1\_bit;

sbit LCD\_D6 at RB2\_bit;

sbit LCD\_D7 at RB3\_bit;

sbit LCD\_RS\_Direction at TRISB4\_bit;

sbit LCD\_EN\_Direction at TRISB5\_bit;

sbit LCD\_D4\_Direction at TRISB0\_bit;

sbit LCD\_D5\_Direction at TRISB1\_bit;

sbit LCD\_D6\_Direction at TRISB2\_bit;

sbit LCD\_D7\_Direction at TRISB3\_bit;

// End LCD module connections

int keyPad(){

// Wait for key to be pressed and released

do

// kp = Keypad\_Key\_Press(); // Store key code in kp variable

kp = Keypad\_Key\_Click(); // Store key code in kp variable

while (!kp);

// Prepare value for output, transform key to it's ASCII value

switch (kp) {

case 1: return 55; break; // 7 // Uncomment this block for keypad4x4

case 2: return 56; break; // 8

case 3: return 57; break; // 9

case 4: return 65; break; // A

case 5: return 52; break; // 4

case 6: return 53; break; // 5

case 7: return 54; break; // 6

case 8: return 66; break; // B

case 9: return 49; break; // 1

case 10: return 50; break; // 2

case 11: return 51; break; // 3

case 12: return 67; break; // C

case 13: return 42; break; // \*

case 14: return 48; break; // 0

case 15: return 35; break; // #

case 16: return 68; break; // D

}

}

char str[10]={'\0','\0','\0','\0','\0','\0','\0','\0','\0','\0'};

char lcdNums[10]={48,49,50,51,52,53,54,55,56,57};

char segNums[10]={0x3F,0x06,0x5B,0x4F,0x66,0

x6D,0x7D,0x07,0x7F,0x6F};

int i=0;

int cnt=0;

char nums[2];

void main() {

// Reset counter

Keypad\_Init(); // Initialize Keypad

ANSEL = 0; // Configure AN pins as digital I/O

ANSELH = 0;

Lcd\_Init(); // Initialize LCD

Lcd\_Cmd(\_LCD\_CLEAR); // Clear display

Lcd\_Cmd(\_LCD\_CURSOR\_OFF); // Cursor off

TRISC=0X00;

PORTC=0x00;

// LCD\_OUT(1,1,"WIRTING");

while(1){

while(cnt<sizeof(nums)){

char kp1= keyPad();

nums[cnt]=kp1;

LCD\_CHR(1,1,kp1);

cnt++;

}

if((nums[0]==56 && nums[1]==57)

|| (nums[0]==57 && nums[1]==56)

){

LCD\_OUT(1,1,"ZEC & ALUTEYI:");

if(i>3)

i=0;

// max 3

if(i>=0 && i<=3){

delay\_ms(500);

LCD\_CHR(1,15,lcdNums[i]);

portc=segNums[i];

}

}

else if((nums[0]==53 && nums[1]==56)

|| (nums[0]==56 && nums[1]==53)

){

LCD\_OUT(1,1,"Dao & ZEC:");

if(i>5 )

{i=3;}

// max 3

if(i>=3 && i<=5){

delay\_ms(500);

LCD\_CHR(1,15,lcdNums[i]);

portc=segNums[i];

}

}

else if((nums[0]==57 && nums[1]==53)

|| (nums[0]==53 && nums[1]==57)

){

LCD\_OUT(1,1,"ALUTEYI & DA0");

if(i<6 || i>8){

i=6;

}

else{

delay\_ms(500);

LCD\_CHR(1,15,lcdNums[i]);

portc=segNums[i];

}

}

else if((nums[0]==54 && nums[1]==56)

|| (nums[0]==54 && nums[1]==56)

){

LCD\_OUT(1,1,"BAULU & ZEC");

if(i<7 || i>9){

i=6;

}

if(i>=7 && i<=8){

delay\_ms(500);

LCD\_CHR(1,15,lcdNums[i]);

portc=segNums[i];

}

}

i++;

}

}