#include<p18f242.h>

#include <xlcd.h>

#include<adc.h>

#include<stdlib.h>

#include <delays.h>

#pragma config OSC = XT, PWRT = ON, WDT = OFF, LVP = OFF, DEBUG = OFF

#pragma config CP0 = OFF, CP1 = OFF, CP2 = OFF, CP3 = OFF, CPB = OFF, CPD = OFF

#pragma config WRT0 = OFF, WRT1 = OFF, WRT2 = OFF, WRT3 = OFF, WRTB = OFF,WRTC = OFF, WRTD = OFF

#pragma config EBTR0 = OFF, EBTR1 = OFF, EBTR2 = OFF, EBTR3 = OFF, EBTRB = OFF

void DelayFor18TCY( void )

{

Nop(); Nop(); Nop();

Nop(); Nop(); Nop();

Nop(); Nop(); Nop();

Nop(); Nop(); Nop();

}

void DelayPORXLCD (void)

{

Delay1KTCYx(60); // Delay of 15ms

// Cycles = (TimeDelay \* Fosc) / 4

// Cycles = (15ms \* 16MHz) / 4

// Cycles = 60,000

return;

}

void DelayXLCD (void)

{

Delay1KTCYx(20); // Delay of 5ms

// Cycles = (TimeDelay \* Fosc) / 4

// Cycles = (5ms \* 16MHz) / 4

// Cycles = 20,000

return;

}

void main (void)

{ while(1){

char sicaklik[]={""};

char isim[]={"BARIS GOZDE"};

OpenXLCD( FOUR\_BIT & LINES\_5X7 );

OpenADC( ADC\_FOSC\_32 & ADC\_RIGHT\_JUST & ADC\_8ANA\_0REF, ADC\_CH0 & ADC\_INT\_OFF );

TRISA=1;

TRISB=0;

TRISD=0;

PORTB=0;

PORTD=0;

WriteCmdXLCD(CURSOR\_OFF & BLINK\_OFF);

Delay10TCYx(5);

while( BusyXLCD() );

WriteCmdXLCD(0x01);

while(BusyXLCD() );

putsXLCD(isim);

Delay100TCYx(25);

ConvertADC ();

while(BusyADC());

itoa(ReadADC()\*0.48828125,sicaklik);

Delay100TCYx(25);

WriteCmdXLCD(0xC0);

while(BusyXLCD() );

putsXLCD(sicaklik);

if(ReadADC()\*0.48828125<10 && ReadADC()\*0.48828125>=0)

PORTDbits.RD0=1;

if(ReadADC()\*0.48828125>=10 && ReadADC()\*0.48828125<20)

PORTDbits.RD1=1;

if(ReadADC()\*0.48828125>=20 && ReadADC()\*0.48828125<30 )

PORTDbits.RD2=1;

CloseADC();

}

}