#pragma config FOSC = HS

#pragma config PWRTE = OFF

#pragma config WDTE = OFF

#pragma config CP = OFF

#pragma config BOREN = OFF

#pragma config LVP = OFF

#pragma config CPD = OFF

#pragma config WRT = OFF

#pragma config DEBUG = OFF

#include <xc.h>

#include <stdio.h>

#include <xc.h>

#include <stdio.h>

#define \_XTAL\_FREQ 20000000

#define rs RC0

#define en RC2

void lcd\_init();

void cmd(unsigned char);

void dat(unsigned char);

void show(unsigned char\*);

void adc(unsigned char);

void lcd\_init(){

cmd(0x38);

cmd(0x0C);

cmd(0x06);

cmd(0x80);

\_\_delay\_ms(2);

}

void main(void) {

TRISCbits.TRISC0 = 0;

TRISCbits.TRISC2 = 0;

TRISB = 0;

TRISA = 0x0f;

lcd\_init();

show((unsigned char\*)"ADC VALUE: ");

while(1){

cmd(0x8B);

adc(0x85);

cmd(0xC0);

adc(0x8D);

cmd(0xC5);

adc(0x95);

cmd(0xCA);

adc(0x9D);

}

}

void cmd(unsigned char a){

PORTB = a;

rs = 0;

en = 1;

\_\_delay\_ms(2);

en = 0;

}

void dat(unsigned char b){

PORTB = b;

rs = 1;

en = 1;

\_\_delay\_ms(2);

en = 0;

}

void show(unsigned char \*s){

while(\*s){

dat(\*s++);

}

}

void adc(unsigned char ch){

unsigned int adcvalue;

ADCON0 = ch;

ADCON1 = 0xC0;

while(GO\_nDONE);

adcvalue = ((ADRESH << 8)|(ADRESL));

dat((adcvalue/1000)+48);

dat(((adcvalue/100)%10)+48);

dat(((adcvalue/10)%10)+48);

dat(((adcvalue/1)%10)+48);

}