

Σύντομα θα ακολουθήσουν οδηγίες και σχόλια!

Πολύ καλό Link : <http://www.microchip.com>

```
/* This is a simple demo project written for use with
 * the HI-TECH Software PICC compiler. It may be compiled
 * and run on the Microchip PICDEM 2 PLUS DEMO BOARD.
 * Features demonstrated include driving the LCD display and
 * the A2D converter.
```

Additional files required for this demo are included in the
PICSAMPLES directories:

```
DELAYdelay.c
DELAYdelay.h
lcd.c
lcd.h
*/
```

```
#include <pic.h>
#include <stdio.h>
#include "lcd.h"
```

```
/* this is the maximum value of an A2D conversion. */
#define MAXVOLTAGE 5
#define SENSITIVITYMASK 0xFC // Reduce precision of A2D result
```

```
void init(void){
    lcd_init(FOURBIT_MODE);
    ADON=1; /* enable A2D converter */
    ADIE=0; /* not interrupt driven */
    ADCON1=0x0E;
    ADCON0=1;
    TRISB=0x00; // Set PORTB in output mode
    T1CON=0x31; // turn on timer 1
    TMR1IE=1; // timer 1 is interrupt enabled
    PEIE=1; // enable peripheral interrupts
    GIE=1; // turn on interrupts
}

void interrupt isr(void){
    if(TMR1IE && TMR1IF){
        PORTB++;
        TMR1IF=0;
    }
}

void main(void){
    unsigned char last_value;
    unsigned char volts;
    unsigned char decivolts;
    unsigned char outString[20];

    init();
    lcd_puts("Adjust the");
    lcd_home2(); // select line 2
    lcd_puts("potentiometer");

    while(1){
        GODONE=1;
        while(GODONE)continue;
        ADIF=0;
        // Mask off the lower two bits as this level of precision
        // is wasted as we're only showing 0.1 volt increments.
        // This reduces unnecessary updates to the LCD.
    }
}
```

```
if((ADRESH&SENSITIVITYMASK)!=(last_value&SENSITIVITYMASK))
{
    volts=0;
    for(decivolts=(ADRESH*10*MAXVOLTAGE/255);decivolts>=10;decivolts-=10)
        volts++;
    lcd_clear();
    sprintf(outString,"A2D = %d.%d volts",volts,decivolts);
    lcd_puts(outString);
}
last_value=ADRESH;
}
}
```