

'-----Title-----

' File.....array2.pbp
' Started....4/23/08
' Microcontroller used: Microchip Technology 16F88
' microchip.com
' PBPro Code, micro-Engineering Labs, Inc.
' melabs.com

'-----Program Description-----

' This program compares the elements of a 7 element array, x[c0].
' The first LCD row displays the values of x[c0] and the second
' LCD row displays the maximum value of x[c0], x_max.

'-----Variables-----

c0	VAR	BYTE	'Byte for counter, c0
x	VAR	BYTE[7]	'BYTE for each of 7 elements 'of array x[]
x_max	VAR	BYTE	'BYTE for maximum value of x_max

'-----Initialization-----

ANSEL = 0 'Configure all pins to digital
'operation since not using ADC
'(Analog to Digital Converter)

OSCCON = \$60 'Sets the internal oscillator in the
'16F88 to 4 MHz

'-----Main Code-----

PAUSE 1000 '1 second PAUSE to allow LCD to setup

x[0] = 2 'Set element values of array x[]
x[1] = 145
x[2] = 56
x[3] = 244
x[4] = 24
x[5] = 248
x[6] = 247

x_max = 0 'Set initial value for x_max

FOR c0 = 0 **TO** 6 'FOR..NEXT loop to compare values of x[c0]

IF x[c0] > x_max **THEN** x_max = x[c0]
'Makes comparison to determine maximum
'value of x[c0]

LCDOUT \$FE,1, #x[c0] 'Display current value of x[c0]

LCDOUT \$FE,\$C0, #x_max 'On the second row of the LCD screen,
'display maximum value of x[c0], x_max.

PAUSE 1500

NEXT c0

'Proceed to NEXT value of c0 until c0 = 6.'

END