

```
'-----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**