

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

```
' File.....array1.pbp
' Started....4/22/08
' Microcontroller used: Microchip Technology 16F88
'                      microchip.com
' PBPro Code, micro-Engineering Labs, Inc.
'                      melabs.com
```

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

```
' The program creates two 6 element arrays. The first LCD row displays
' the first array, the counter variable, x[c0] = c0 and the second LCD
' row displays the second array, the counter variable doubled, y[c0] =
c0*2.
```

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

```
c0      VAR     BYTE      ' Byte for counter
x       VAR     BYTE[6]   ' BYTE for each of 6 elements
                  ' of array x[]
y       VAR     BYTE[6]   ' BYTE for each of 6 elements
                  ' of array y[]
```

' -----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

FOR c0 = 0 TO 5      ' FOR..NEXT loop to create 6 entries in
                     ' each array

  x[c0] = c0          ' Assign value of c0 to each array element
                     ' in x[c0]. For example, when c0 = 1,
                     ' x[1] = 1.

  y[c0] = c0*2        ' Assign value of c0*2 to each array
                     ' element in y[c0]. For example, when
                     ' c0 = 1, y[1] = 2.

NEXT c0              ' Proceed to NEXT value of c0 until c0 = 5.

LCDOUT $FE,1, #x[0],$14,#x[1],$14,#x[2],$14,#x[3],$14,#x[4],$14,#x[5]
                    ' On the first row of an LCD screen, display
                    ' each 8-bit element of array x[c0] from
                    ' x[0] to x[4]. A space, ($14), is inserted
                    ' between each element.
```

```
LCDOUT $FE,$C0,#y[0],$14,#y[1],$14,#y[2],$14,#y[3],$14,#y[4],$14,#y[5]
      ' On the second row of an LCD screen, display
      ' each 8-bit element of array y[c0] from
      ' y[0] to y[4]. A space,($14), is inserted
      ' between each element.

PAUSE 500                         ' PAUSE 500ms or 1/2 second

END
```