```
/*************
 2
     Project: Icd_example.c
 3
     Version: 1.0
 4
           : 7/08/2004
     Date
 5
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 6
     Company: MyRobot
 7
     Comments: This is the first example program.
 8
                 It increments i every second, and
9
                 displays its value on the LCD.
10
11
     Robot Type: Model-T or Mini-T
12
13
     //Compiler Derectives
14
15
     //Includes
16
     #include <model t. h>
17
18
     //Global Variables
19
     char str[16];
                             //This variable is used to store a formated string before it send sent to
20
                             //the LCD.
21
22
     //Mai n
23
     int main(void)
24
25
26
     //Local Variables
27
          float pi = 3. 1415926535898;
28
29
     //Initialization
30
         reset();
                             //Reset and all ports and peripherials
31
32
         I cd_i ni t ();
                             //Initialize the LCD
33
34
     //Main Exectution Code
35
36
37
38
         while (1)
                                         //Loop forever.
39
             //This block illustrates how to display a line of text using the line1() function call
40
             //and the strcpy() line formating function.
41
             strcpy(str, "This is on Line1");
42
43
             line1(str);
44
45
             //This block illustrates how to use the sprintf() formating function and the line2()
             //function to display text on line 2 of the LCD.
46
             sprintf(str, "pi = %1.9f", pi);
47
48
             line2(str);
49
50
             ms_spin(5000); //Wait 5000 milliseconds (5 seconds)
51
52
             clr_lcd();
                                 //Clear the LCD display
53
54
             //This function uses the pstrp() function to center the string 'Centered' on line 1 of
```

```
55
56
                    //the LCD.
                   strcpy(str, "Centered
                                                          ");
                                                                        //Copy the string 'Centered' to the character
57
                                                                        //array 't'.
//Insert the string stored in 't' four characters
58
59
60
                    pstrp(str, 4);
                                                                        //in from line 1.
                                                                        //Copy the string 'Lines' to the character array 't'.
//Print thE string stored in 't' five characters
//(22 - 17 = 5) in from line 2.
                    strcpy(str, "Li nes
pstrp(str, 22);
                                                               ");
61
62
63
64
65
                    ms_spi n(5000);
              }
66
67
        }
68
69
70
```