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 1: sbit LCD_RS at RD1_bit;
 2: sbit LCD_EN at RD2_bit;
 3: sbit LCD_D7 at RC6_bit;
 4: sbit LCD_D6 at RC5_bit;
 5: sbit LCD_D5 at RC4_bit;
 6: sbit LCD_D4 at RD4_bit;
 7:
 8: sbit LCD_RS_Direction at TRISD1_bit;
 9: sbit LCD_EN_Direction at TRISD2_bit;
10: sbit LCD_D7_Direction at TRISC6_bit;
11: sbit LCD_D6_Direction at TRISC5_bit;
12: sbit LCD_D5_Direction at TRISC4_bit;
13: sbit LCD_D4_Direction at TRISD4_bit;
14:
15: char txt[16];
16: float volt;
17: float CT, temp;
18:
19: void main() {
20:     TRISB = 0;
21:     PORTB = 0;
22:     TRISC = 0;
23:     PORTC = 0;
24:     TRISD = 0; // Define D as output
25:
26:     Lcd_Init(); // Initialize LCD screen
27:     Lcd_Cmd(_LCD_CLEAR); // Clear display
28:     Lcd_Cmd(_LCD_CURSOR_OFF); // Cursor off
29:     Lcd_Out(1, 1, "Processing..."); // Write text in the first row
30:     Delay_ms(1000); // Wait for 1 second
31:     Lcd_Cmd(_LCD_CLEAR); // Clear display
32:     Lcd_Cmd(_LCD_CURSOR_OFF); // Cursor off
33:     portb.f1 = 1; // Open the heater
34:     portb.f2 = 1; // Open the heater
35:     while(1){
36:         volt = ADC_Read(0);
37:         CT = volt * 4.882;
38:         temp = CT / 10;
39:         Lcd_Out(1, 1, "Temp: ");
40:         FloatToStr(temp, txt);
41:         Lcd_Out(1, 7, txt);
42:         Lcd_Out(1, 15, "C");
43:             if(temp >= 37) {
44:             portb.f1 = 0; // Close the heater
45:             portb.f2 = 0; // Close the heater
46:             }else{
47:             portb.f1 = 1; // Open the heater
48:             portb.f2 = 1; // Open the heater
49:             }
50:         // Wait for 1 second
51:         Delay_ms(100);
52:     }
53: }
```