```
#include <p18f4550.h>

#define LCD_EN LATAbits.LA1
#define LCD_RS LATAbits.LA0
#define LCDPORT LATB


void lcd_delay(unsigned int time)
{
 unsigned int i , j ;

   for(i = 0; i < time; i++)
   {
         for(j=0;j<100;j++);
   }
}


void SendInstruction(unsigned char command)
{
    LCD_RS = 0;                 // RS low : Instruction
    LCDPORT = command;
    LCD_EN = 1;                 // EN High
    lcd_delay(10);
    LCD_EN = 0;                 // EN Low; command sampled at EN falling edge
    lcd_delay(10);
}

void SendData(unsigned char lcddata)
{
    LCD_RS = 1;                 // RS HIGH : DATA
    LCDPORT = lcddata;
    LCD_EN = 1;                 // EN High
    lcd_delay(10);
    LCD_EN = 0;                 // EN Low; data sampled at EN falling edge
    lcd_delay(10);
}

void InitLCD(void)
{
   ADCON1 = 0x0F;
   TRISB = 0x00; //set data port as output
   TRISAbits.RA0 = 0; //RS pin
   TRISAbits.RA1 = 0; // EN pin
```

```
   SendInstruction(0x38);      //8 bit mode, 2 line,5x7 dots
   SendInstruction(0x06);       // entry mode
   SendInstruction(0x0C);      //Display ON cursor OFF
   SendInstruction(0x01);      //Clear display
   SendInstruction(0x80);      //set address to 1st line

}
/*****************************************************************************************************
********/

unsigned char *String1 = "Microembedded";
unsigned char *String2 = "PIC-18F Board";

void main(void)
{
   ADCON1 = 0x0F;
   TRISB = 0x00;       //set data port as output
   TRISAbits.RA0 = 0;  //RS pin
   TRISAbits.RA1 = 0;  // EN pin

   SendInstruction(0x38);      //8 bit mode, 2 line,5x7 dots
   SendInstruction(0x06);      // entry mode
   SendInstruction(0x0C);      //Display ON cursor OFF
   SendInstruction(0x01);      //Clear display
   SendInstruction(0x80);      //set address to 1st line

 while(*String1)
 {
  SendData(*String1);
  String1++;
 }

 SendInstruction(0xC0);      //set address to 2nd line
 while(*String2)
 {
  SendData(*String2);
  String2++;
 }

 while(1);

}
```