```
 1 //LCD Header file
 2
 3 #ifndef LCD_H
 4 #defineLCD_H
 5
 6 #include<P18F452.h>
 7 #pragma config OSC = HS
 8 #pragma config PWRT = OFF
 9 #pragma config DEBUG = OFF
10 #pragma config WDT = OFF
11 #pragma config LVP = OFF
12
13 #define RS PORTCbits.RC0        //Declaration of pin labels
14 #define RW PORTCbits.RC1
15 #define EN PORTCbits.RC2
16
17 void milliDelay(unsigned int time){//Function for generating delay in
millisecs
18 int i,j;
19 for(i=0;i<time;i++);
20 for(j=0;j<165;j++);
21 }
22
23 void sendCommand(unsigned char send){
24 milliDelay(3);
25 RS = 0;//Select command register
26 RW = 0; //Select write to LCD mode
27 PORTD = send;//Send command to LCD
28 EN = 1;
29 milliDelay(5);
30 EN = 0;
31 }
32
33 void sendData(unsigned char send){
34 milliDelay(3);
35 RS = 1;//Select display register
36 RW = 0; //Select write to LCD mode
37 PORTD = send;//Send command to LCD
38 EN = 1;
39 milliDelay(5);
40 EN = 0;
```

```
41 }
42
43 void displayMsg(unsigned char row,unsigned char column,rom unsigned char
*message){
44 if(row == 1)              //Function for displaying a string
45 row = 0x80;
46 else
47 row = 0xC0;
48
49 sendCommand(row | column);
50 while(*message){
51 sendData(*message);
52 message++;
53 }
54 }
55
56 void initLCD(void){//Function to initialise LCD
57 TRISD = 0x00;
58 TRISCbits.TRISC0 = 0;
59 TRISCbits.TRISC1 = 0;
60 TRISCbits.TRISC2 = 0;
61 sendCommand(0x38);
62 sendCommand(0x0E);
63 sendCommand(0x01);
64 sendCommand(0x06);
65 }
```