

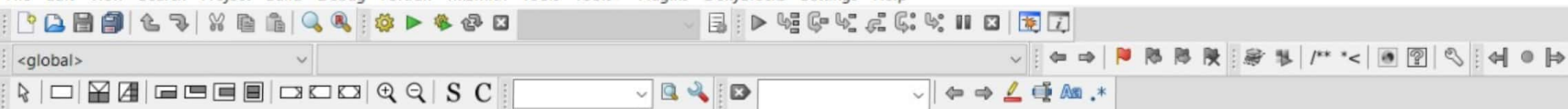


Management
Projects Files FSy
Workspace

```
1 #include "common.h"
2 #include "keypad.h"
3 #include "lcd.h"
4
5 #define PASSWORD "1234"
6
7 void setup();
8 void loop();
9 int compare_password(const char *input_password);
10 void handle_successful_password();
11 void handle_incorrect_password();
12 void shift_text(const char *line1, const char *line2);
13
14 int main(void) {
15     setup();
16
17     while (1) {
18         loop();
19     }
20 }
21
22 void setup() {
23     lcd_init();
24     keypad_init();
25
26     lcd_cmd(_LCD_CLEAR);
27     lcd_cmd(_LCD_RETURN_HOME);
28     lcd_cmd(_LCD_CURSOR_OFF);
29     lcd_out(1,1, "WELCOME.USER");
30     __delay_ms(2000);
31 }
32
33 void loop() {
34     lcd_cmd(_LCD_CLEAR);
35     lcd_out(1,1, "ENTER PASSWORD:");
36
37     char user_password[10] = {0};
38     int index = 0;
39     lcd_set_cursor(2, 1);
40 }
```



```
38     int index = 0;
39     lcd_set_cursor(2, 1);
40
41     while (1) {
42         unsigned char input = keypad_get_key();
43
44         if (input != '\0') {
45             if (input != '=') {
46                 user_password[index++] = input;
47                 lcd_chr_cp(input);
48             } else {
49                 user_password[index] = '\0';
50
51                 if (compare_password(user_password)) {
52                     handle_successful_password();
53                 } else {
54                     handle_incorrect_password();
55                 }
56                 break;
57             }
58         }
59     }
60 }
61
62 int compare_password(const char *input_password) {
63     return strcmp(input_password, PASSWORD) == 0;
64 }
65
66 void handle_successful_password() {
67     lcd_cmd(_LCD_CLEAR);
68     shift_text("Mohamed", "Magdy");
69 }
70
71 void handle_incorrect_password() {
72     lcd_cmd(_LCD_CLEAR);
73     lcd_out(1, 1, "WRONG PASSWORD");
74     __delay_ms(1500);
75 }
76
77 void shift_text(const char *line1, const char *line2) {
```



Management

Projects Files FSy

Workspace

Start here x MohamedMagdy.c x

```
56         break;
57     }
58 }
59 }
60 }
61
62 int compare_password(const char *input_password) {
63     return strcmp(input_password, PASSWORD) == 0;
64 }
65
66 void handle_successful_password() {
67     lcd_cmd(LCD_CLEAR);
68     shift_text("Mohamed", "Magdy");
69 }
70
71 void handle_incorrect_password() {
72     lcd_cmd(LCD_CLEAR);
73     lcd_out(1,1, "WRONG PASSWORD");
74     __delay_ms(1500);
75 }
76
77 void shift_text(const char *line1, const char *line2) {
78     while (1) {
79         lcd_cmd(LCD_CLEAR);
80         lcd_out(1,1, line1);
81         lcd_out(2,1, line2);
82
83         for (int i = 0; i < 8; i++) {
84             lcd_cmd(LCD_SHIFT_RIGHT);
85             __delay_ms(300);
86         }
87
88         for (int i = 0; i < 8; i++) {
89             lcd_cmd(LCD_SHIFT_LEFT);
90             __delay_ms(300);
91         }
92     }
93 }
94 }
```