

Keypad Base Lock with PIC

DESCRIPTION

This Keypad base electronic lock is able to use for security systems. You can add Electromagnetic lock through transistor to output (pin 4) and alarm devise to Emergency output (pin 5) of the circuit. This project made using MikroC PRO C compiler. If you want to change Master Code, can change it using C code (see Tutorial Guide 01). This project has two codes, first is Manual reactivate lock and second is Auto reactivate lock. You are able to use any of them.

- ❖ Manual Reactivate Lock – Password need to both deactivate and reactivate lock. (see Video Guide)
- ❖ Auto Reactivate Lock – Password need only to deactivate lock. Lock is auto reactivating after 10-15 seconds. You are able to change this time period. (see Tutorial Guide 02)

Tutorial Guide 01

```
// If you want to change Master Key, add your numbers to '2' '3' '4' '5' '5'
→ if(code1[0] == '2' && code1[1] == '3' && code1[2] == '4' && code1[3] == '5' && code1[4] == '5')
{
    code_enter();
    if(code1[5] == 35)
    {
        change_code();
        goto top ;
    }
}
```

Tutorial Guide 02

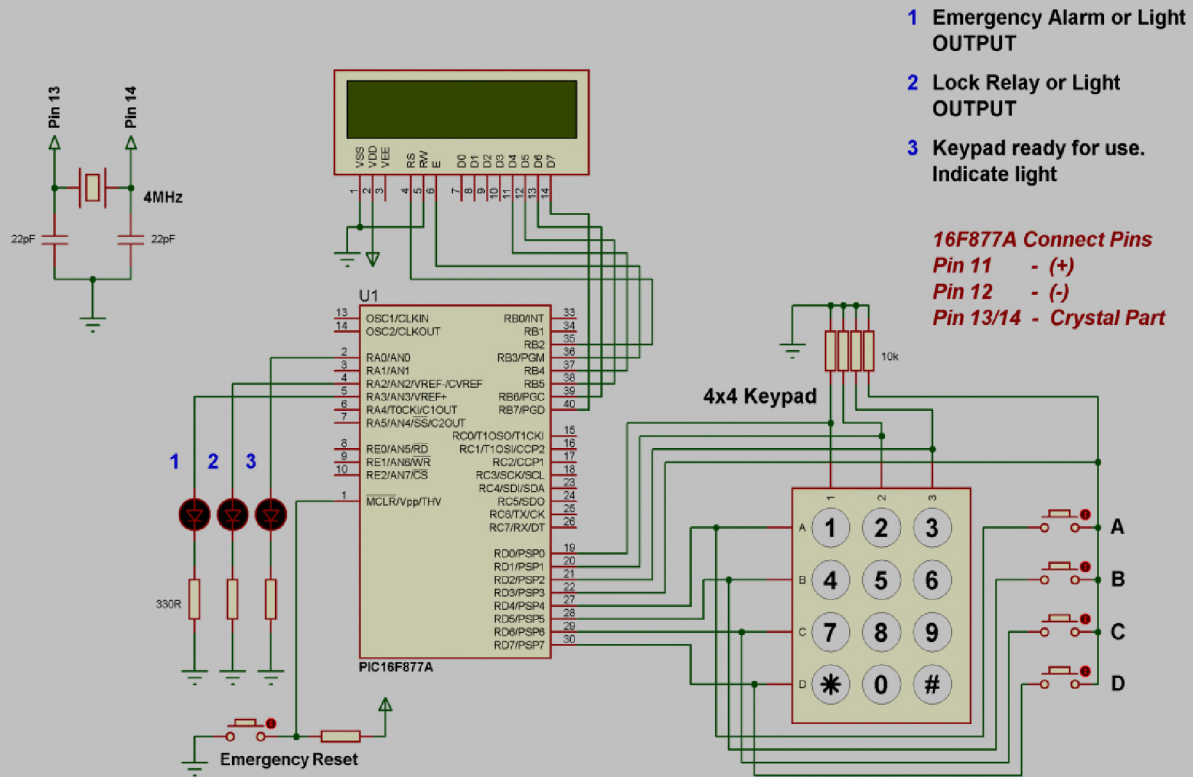
```
218      Lcd_Cmd(_LCD_SHIFT_RIGHT);
219      Move_Delay();
220      Delay_ms(2000);
221      Delay_ms(1000);    // Lock reactivate Time
222      PORTA.B2=0;
```

Important :

You can use any new password (4 digit) for this keypad lock without changing C code. (for more information follow Video Guide or download project)

CIRCUIT DIAGRAM

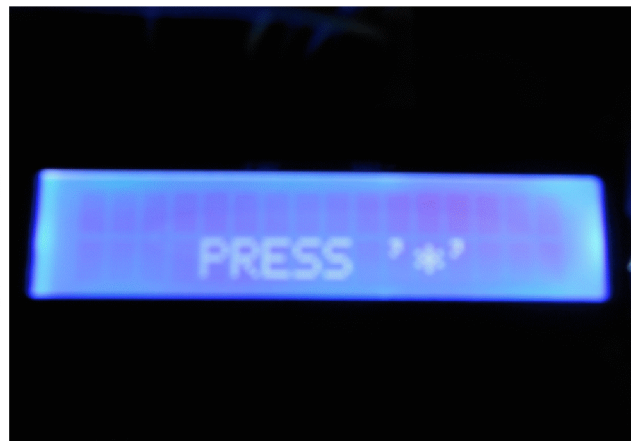
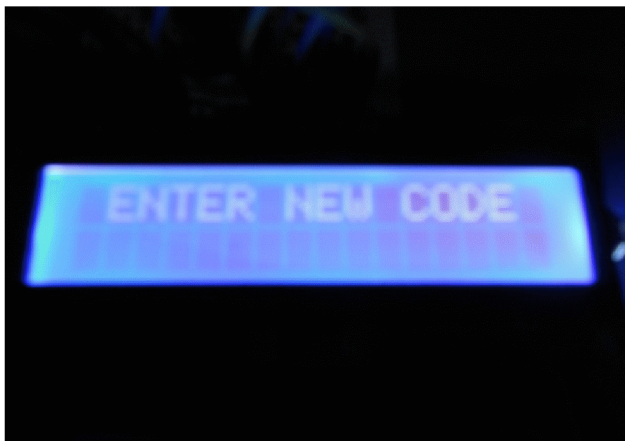
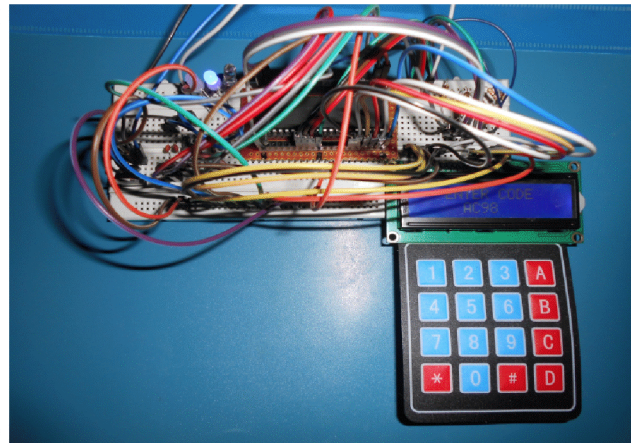
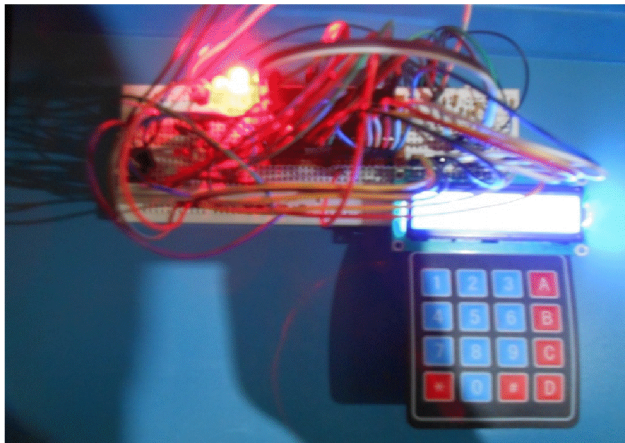
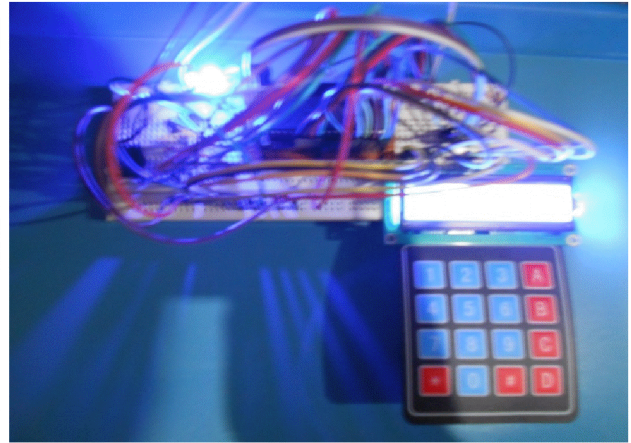
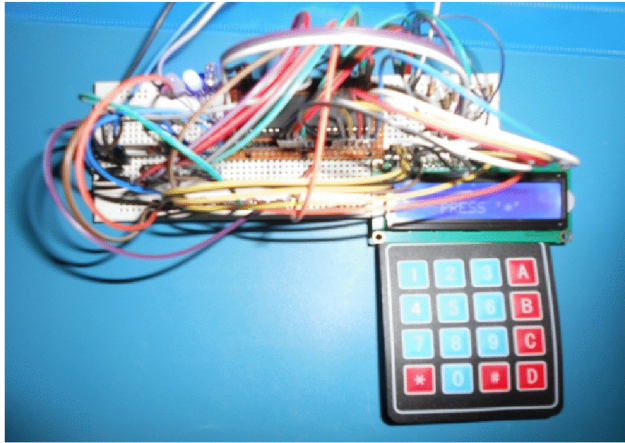
Keypad Lock (with PIC)



PARTS LIST :

- PIC Programmer
- 16F877A PIC Microcontroller
- 16x2 LCD Display
- 4x4 Keypad
- 4MHz Crystal
- 10K Resistors
- 470/330 Resistors
- 22pF Capacitors
- Push button
- LEDs or Output Devices

FINAL PROJECT



CREATED BY HASITHA SUNETH
www.hasisuneth.blogspot.com