

; ***** compare current and preset zones status (This part is where an alarm is trigger start)
CHECKZONE:

```
movf ENTRYDELAY2,W ; has entry2 delay timed out?
btfss STATUS,Z (This part is where checking for 2nd keypad)
call CONTINUEENTRY2 ; no, continue countdown

movf ZONESVAL,W ; get current zones val (This part is where zones normal mode from eeprom)
xorwf ZONENORMAL,W ; XOR with normal zones status (This part is where zone compare is made)
btfss STATUS,Z ; has a zone status been changed? (This part is where checking for zone trigger)
goto ZCH2 ; yes ( If zone is trigger, then jump to ZHC2)
movf ALARMZONE,W ; have any zones been triggered?
btfsc STATUS,Z ; If no zone trigger, then return scan again)
return ; no
```

ZCH2:

```
movwf ZONESVAL ; yes (This part show zone check with input compare with eeprom)
andwf INCLZONE,W ; is it a required zone? ( This part is where checking is zone put on active?)
btfsc STATUS,Z (If you set Z1,3,4,5,8 active, then z2 alarm, program will return and scan again)
return ; no

movwf ZONESVAL (This part is zone is active, so continue)
btfsc ALARMSTATUS,5 ; yes, is alarm in passive status (just sets buzzer)?
return ; yes (This part is when you are in monitoring mode, if not, continue)
iorwf ALARMZONE,W ; no, OR answer with previous zones triggered value
movwf ALARMZONE

btfsc ALARMSTATUS,STROBE ; has alarm already been triggered? (This part confirm alarm)
goto ZONEB ; yes

movf ALARMZONE,W

andwf EXITZONE,W ; has entry zone been triggered? (This part check entry zone)
btfsc STATUS,Z
goto ZONEB ; no

movf ENTRYDELAY,W ; yes, has entry delay timed out?
```

```

btfsc STATUS,Z
goto ZONEB ; yes
bsf ALARMSTATUS,BUZZER ; no so continue countdown
call CONTINUEENTRY ;
call LCD21 ;set address for line 1 cell 1
bsf RSLINE,4 ;set RS for data send
movlw 'E'
call LCDOUT
movlw 'N'
call LCDOUT
movlw 'T'
call LCDOUT
movlw 'R'
call LCDOUT
movlw 'Y'
call LCDOUT
return

```

ZONEB:

```

movf ALARMZONE,W
xorwf PREVALARMZONE,W ; is it same as previous alarm zone setting?
btfsc STATUS,Z
return ; yes
movf ALARMZONE,W
movwf PREVALARMZONE
movwf STORE1 ; store INTRUDED status
movlw 7
call SETPRM

```

CHECKZONE2: ; called also from power up entry

```

call LCD1 ;set address for line 1 cell 1
bsf RSLINE,4 ;set RS for data send

```

```
movf ALARMZONE,W
movwf STORE1 ; store INTRUDED status
call SHOWZONE
clrf LOOP ;clear loop
bsf RSLINE,4 ;set RS for data send
btfss ALARMSTATUS,PANIC
goto LCDMS3 ; ..... TRIG
movlw 'P'
call LCDOUT
```

LCDMS3:

```
movf LOOP,W ;get table address
call MESSAG2 ;get ENTERED message letter
call LCDOUT ;show it
incf LOOP,F ;inc loop
btfss LOOP,3 ;has last LCD letter been sent?
goto LCDMS3 ;no
```

TRIG: btfss ALARMSTATUS,STROBE ; has alarm already been triggered?

(This is where you got stuck. Meaning 1st alarm with bell, 2nd alarm no bell)

```
bsf ALARMSTATUS,BELL ; no, so trigger bell
```

```
bsf ALARMSTATUS,BUZZER
```

```
bsf ALARMSTATUS,STROBE
```

```
movf ALARMSTATUS,W ; store ALARMSTATUS (but with bell off) to eeprom
```

```
movwf STORE1
```

```
bcf STORE1,BELL
```

```
movlw 8
```

```
call SETPRM
```

```
return
```