

```

define osc 8
oscon.4 = 1
oscon.5 = 1
oscon.5 = 1

' Define configuration settings (different from defaults)
#CONFIG
    __CONFIG __CONFIG1, _INTRC_IO & _PWRTM_ON & _MCLR_OFF & _LVP_OFF
#ENDCONFIG

ansel = 1

key var byte
i var byte
j var byte

rw1 var portb.7
rw2 var portb.6
rw3 var portb.5
rw4 var portb.4
cl1 var portb.2
cl2 var portb.1
cl3 var portb.0
delay var word

key = 0

option_reg = $7f
TRISA = %00000
TRISB = %11111000

myloop:
    'check column 1
    low cl1
    high cl2
    high cl3
    i = 1
    gosub getkey
    gosub update

    'check column 2
    high cl1
    low cl2
    high cl3
    i = 2
    gosub getkey
    gosub update

    'check column 3
    high cl1
    high cl2
    low cl3
    i = 3
    gosub getkey

```

```
        gosub update
goto myloop

getkey:
    while(rw1 == 0)
        j = 1
        key = i + j - 1
        gosub update
    wend
    while(rw2 == 0)
        j = 4
        key = i + j - 1
        gosub update
    wend
    while(rw3 == 0)
        j = 7
        key = i + j - 1
        gosub update
    wend
    while(rw4 == 0)
        j = 10
        key = i + j - 1
        gosub update
    wend
    key = 0
    return

update:
    porta = key
    return

end
```