

```
INCLUDE "P16F84A.INC"
```

j EQU 0x0c

```
ORG    0x00
```

MOV LW 0x00

BCF STATUS,5

LEDOnoff:

```
movlw b'00000001'
```

```
movwf PORTB
```

```
call delay
```

```
movlw b'00000000'
```

```
movwf PORTB
```

```
call delay
```

```
goto LEDonoff
```

```
delay:
```

```
movlw d'200'
```

```
movwf j
```

```
jloop:
```

```
movwf k
```

```
kloop:
```

```
decfsz k,f
```

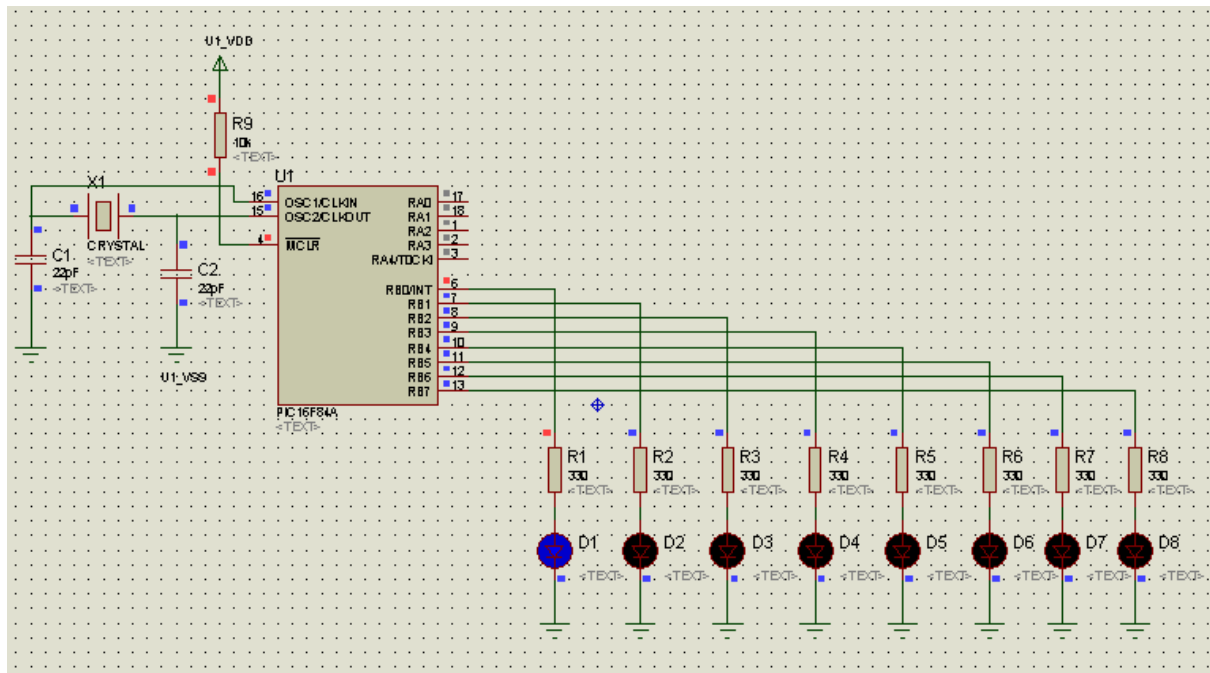
```
goto kloop
```

```
decfsz j,f
```

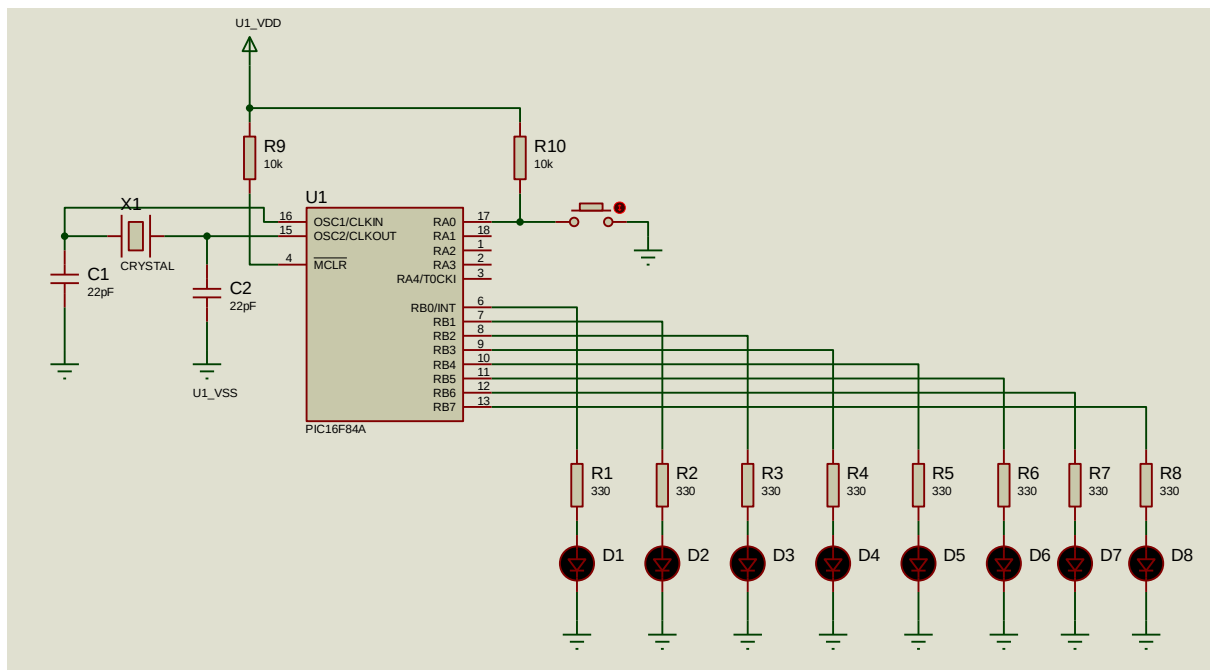
```
goto jloop
```

```
return
```

```
End
```



LED Flash / Push Button Example



LIST p=16F84A

INCLUDE "P16F84A.INC"

_CONFIG _CP_OFF & _WDT_OFF & _PWRTE_ON & _XT_OSC

ORG 0x00

CLRF PORTB

BSF STATUS,5

MOVLW 0x00

MOVWF TRISB

MOVLW 0x01

MOVWF TRISA

BCF STATUS,5

LEDcntrl:

BTFSS PORTA,0

GOTO TURN_ON

BCF PORTB,0

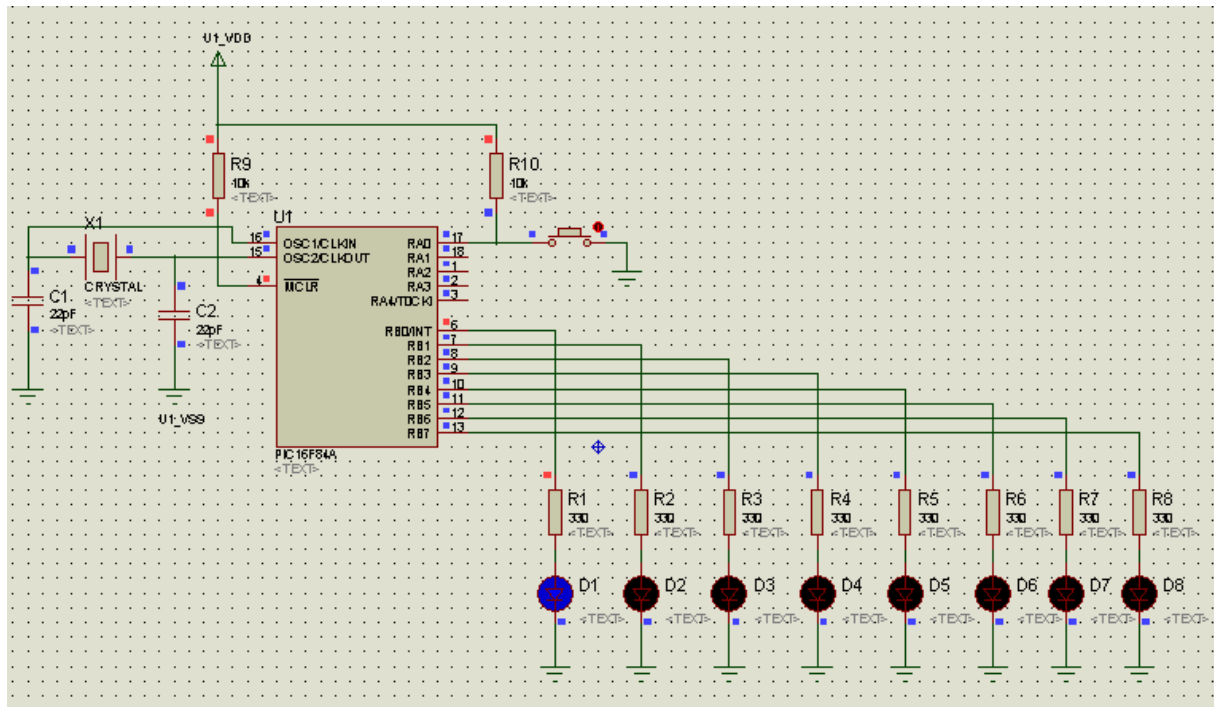
GOTO LEDcntrl

TURN_ON

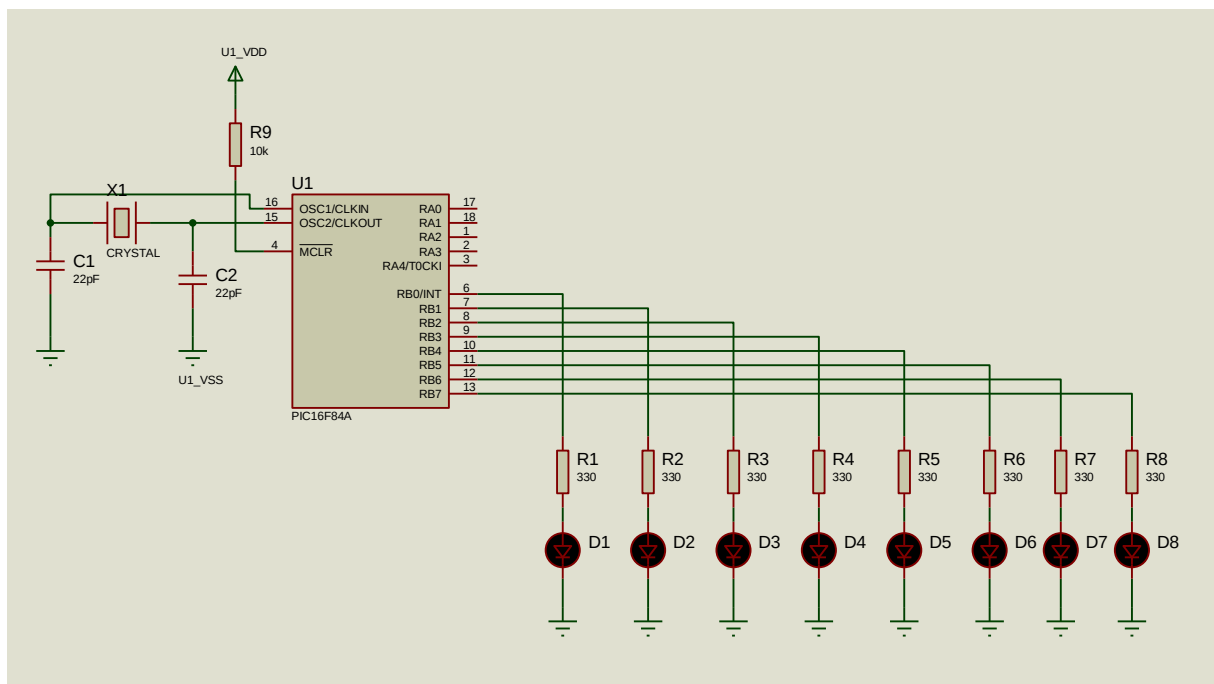
BSF PORTB,0

GOTO LEDcntrl

End



Counter Example



LIST p=16F84A

INCLUDE "P16F84A.INC"

__CONFIG __CP_OFF & __WDT_OFF & __PWRTE_ON & __XT_OSC

```
j      EQU  0x0c
k      EQU  0x0d
```

```
ORG    0x00
```

```
CLRF PORTB
```

```
BSF STATUS,5
```

```
MOVLW 0x00
```

```
MOVWF TRISB
```

```
BCF STATUS,5
```

```
MLOOP:
```

```
INCF PORTB,F
```

```
CALL DELAY
```

```
GOTO MLOOP
```

```
DELAY:
```

```
    movlw d'200'
```

```
    movwf j
```

```
jloop:
```

```
    movwf k
```

```
kloop:
```

```
    decfsz k,f
```

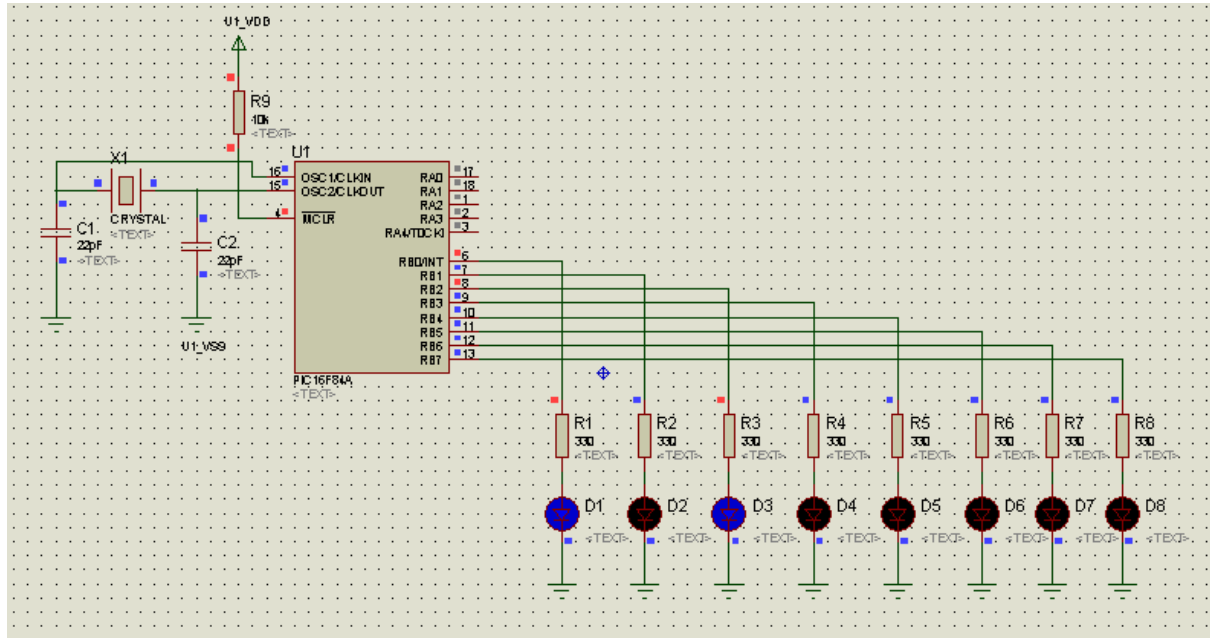
```
    goto kloop
```

```
    decfsz j,f
```

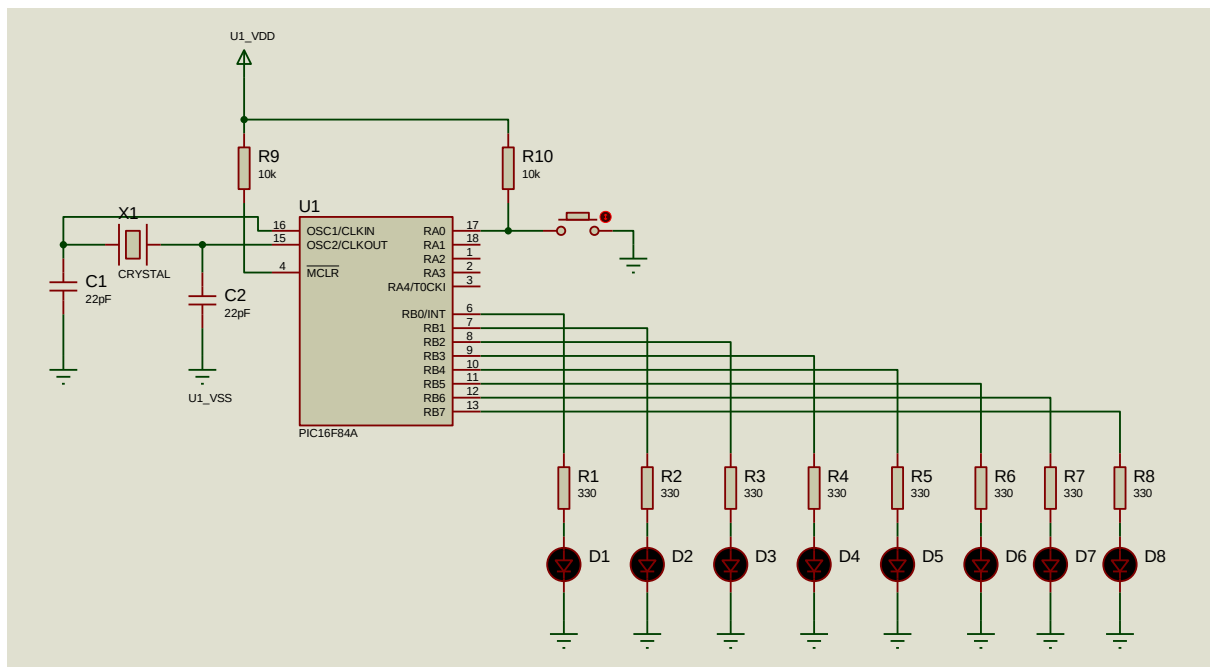
```
    goto jloop
```

return

End



Push Button Counter



LIST p=16F84A

INCLUDE "P16F84A.INC"

__CONFIG __CP_OFF & __WDT_OFF & __PWRTE_ON & __XT_OSC

SAYAC1 EQU h'0C'

SAYAC2 EQU h'0D'

MEM EQU h'0E'

ORG 0x00

CLRF PORTB

BSF STATUS,5

CLRF TRISB

BSF TRISA,0

BCF STATUS,5

CLRF MEM

TEKRAR

BTFSC PORTA,0

GOTO TEKRAR

INCF MEM

MOVF MEM,W

SUBLW d'3'

BTFSC STATUS,2

GOTO YAK

CALL GECIKME

GOTO TEKRAR

YAK

MOVLW h'00'

MOVWF MEM

MOVLW h'FF'

MOVWF PORTB

GECIKME

movlw h'FF'

movwf SAYAC1

DONGU1

movwf SAYAC2

DONGU2

decfsz SAYAC2,F

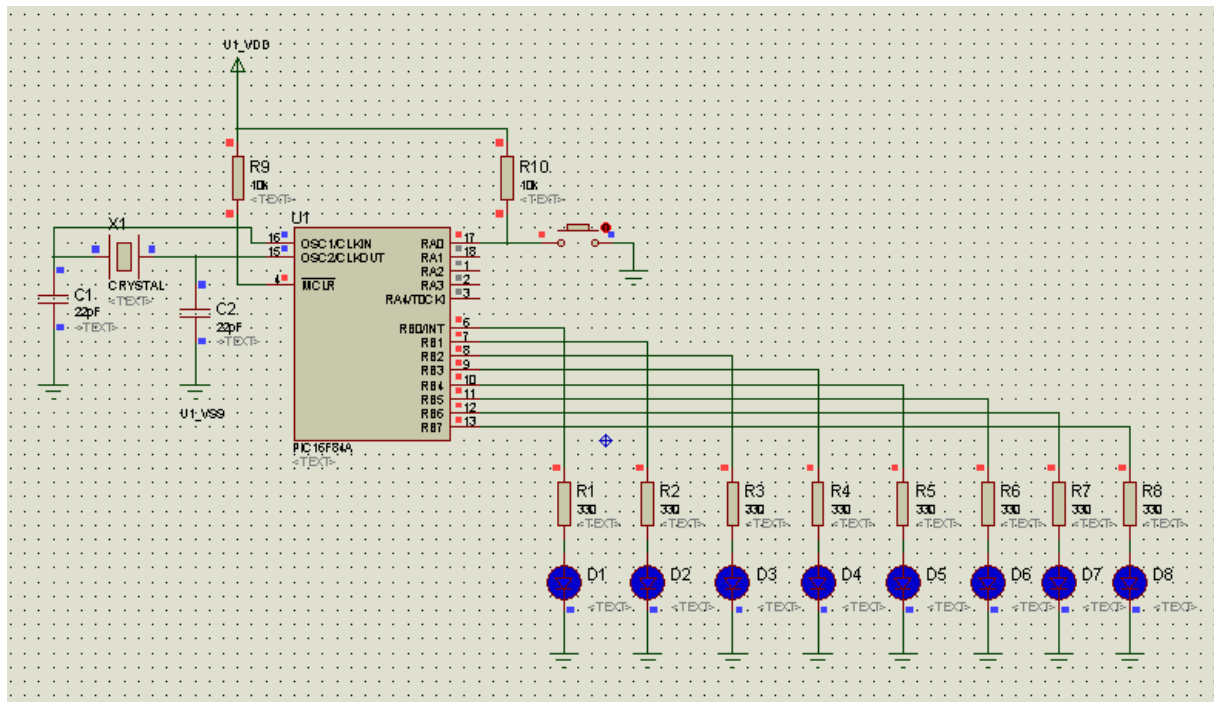
goto DONGU2

decfsz SAYAC1,F

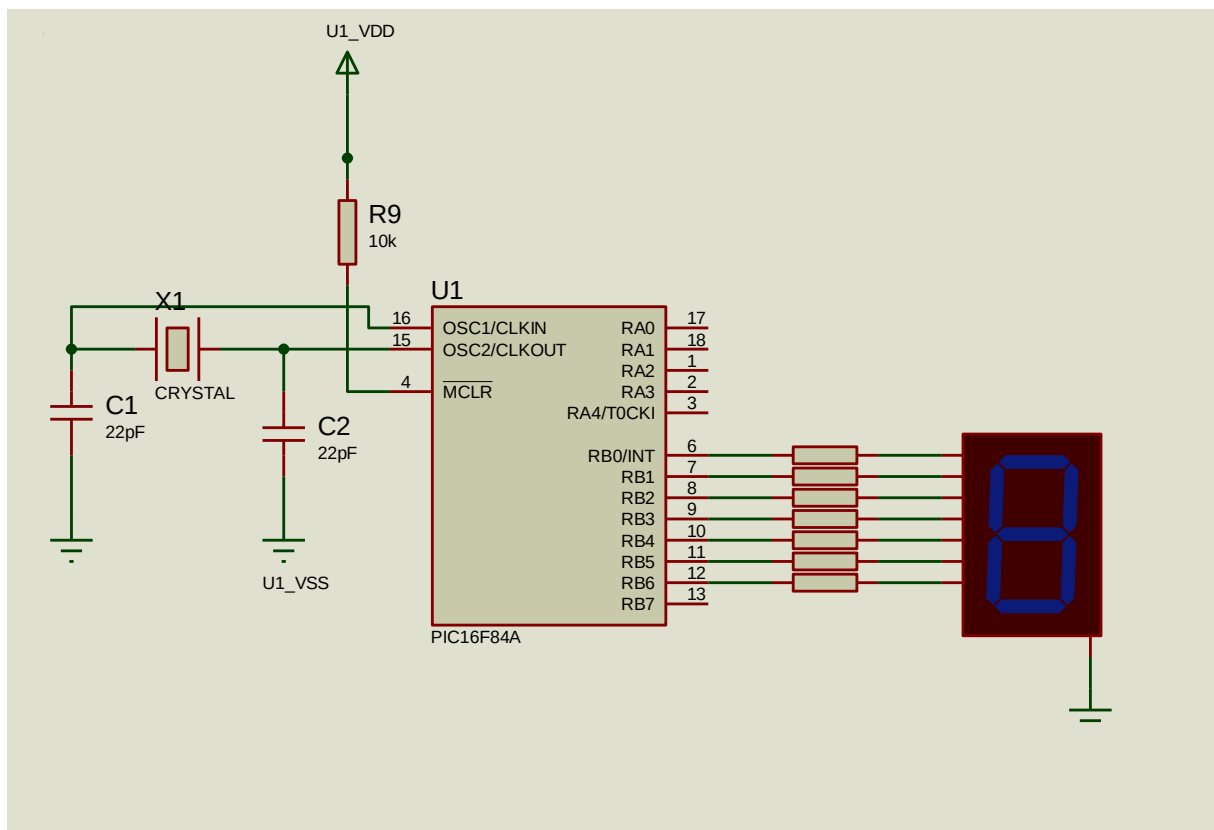
goto DONGU1

return

End



Seven Segment Display Example



LIST p=16F84A

INCLUDE "P16F84A.INC"

__CONFIG __CP_OFF & __WDT_OFF & __PWRTE_ON & __XT_OSC

SAYAC1 EQU 0x0C

SAYAC2 EQU 0x0D

ORG 0x00

CLRF PORTB

BSF STATUS,5

CLRF TRISB

BCF STATUS,5

BASLA

MOVLW h'05'

CALL CEV_TAB

MOVWF PORTB

CALL GECIKME

MOVLW h'09'

CALL CEV_TAB

MOVWF PORTB

CALL GECIKME

GOTO BASLA

GECIKME

movlw h'FF'

movwf SAYAC1

DONGU1

movwf SAYAC2

DONGU2

decfsz SAYAC2,F

goto DONGU2

decfsz SAYAC1,F

goto DONGU1

return

CEV_TAB

ADDWF PCL,F

RETLW h'3F'

RETLW h'06'

RETLW h'5B'

RETLW h'4F'

RETLW h'66'

RETLW h'6D'

RETLW h'7D'

RETLW h'07'

RETLW h'7F'

RETLW h'6F'

RETLW h'77'

RETLW h'7C'

RETLW h'39'

```

RETLW    h'5E'

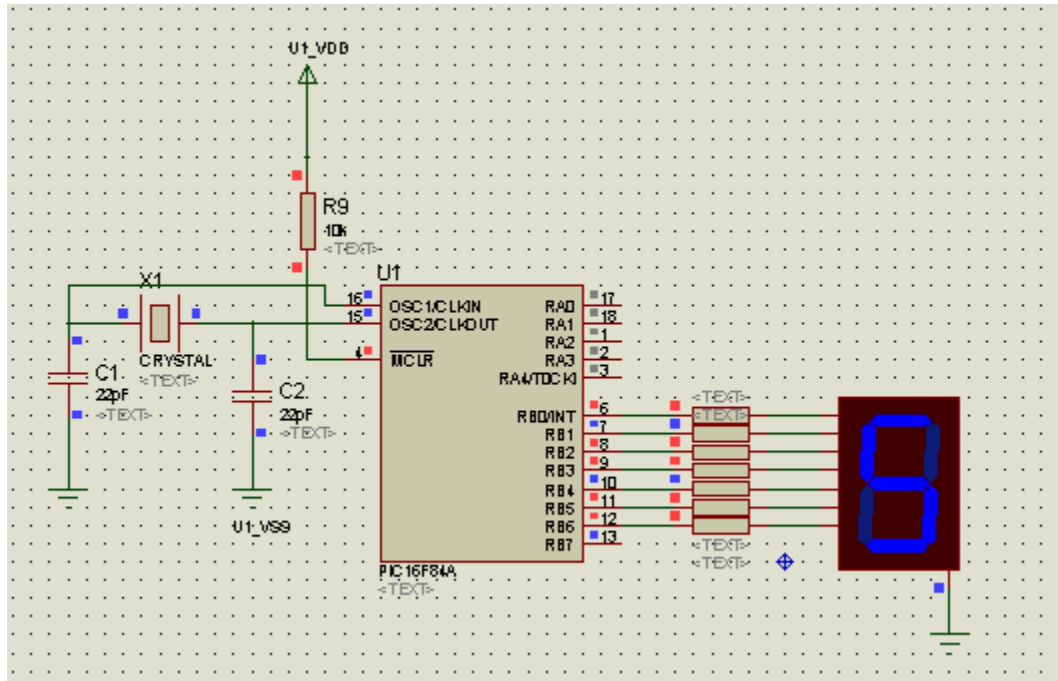
RETLW    h'79'

RETLW    h'71'

RETLW    h'80'

```

END



Reference: Microcontroller Programming, Julio Sanchez, Maria P. Canton

Mikrodenetleyiciler ve PIC Programlama, Orhan Altınbaşak