```
LIST P=18F458                          CALL DATAWRT
#INCLUDE <P18F458.INC>                 MOVLW '7'
                                       CALL DATAWRT
LCD_DATA EQU PORTD                     CALL DELAY
LCD_CTRL EQU PORTC                     MOVLW '2'
RS EQU RC0                             CALL DATAWRT
RW EQU RC1                             MOVLW '9'
EN EQU RC2                             CALL DATAWRT
COUNTER EQU 0X86

                                       AGAIN:
CLRF TRISD                             BTG LCD_CTRL,0
CLRF TRISC                             BRA AGAIN
BCF LCD_CTRL, EN
CALL LDELAY                            COMNWRT:
MOVLW 0X38                             MOVWF LCD_DATA
CALL COMNWRT                           BCF LCD_CTRL, RS
CALL LDELAY                            BCF LCD_CTRL, RW
MOVLW 0X0C                             BSF LCD_CTRL, EN
CALL COMNWRT                           CALL SDELAY
CALL DELAY                             BCF LCD_CTRL, EN
MOVLW 0X06                             RETURN
CALL COMNWRT
CALL DELAY                             DATAWRT:
MOVLW 0X06                             MOVWF LCD_DATA
CALL COMNWRT                           BSF LCD_CTRL, RS
CALL DELAY                             BCF LCD_CTRL, RW
MOVLW 0X84                             BSF LCD_CTRL, EN
CALL COMNWRT                           CALL SDELAY
CALL DELAY                             BCF LCD_CTRL, EN
MOVLW '7'                              RETURN
```

```
LDELAY:
  MOVLW  D'10'
  MOVWF  COUNTER
LOOP1:
  DECFSZ  COUNTER, F
  GOTO  LOOP1
  RETURN


SDELAY:
  MOVLW  D'10'
  MOVWF  COUNTER
LOOP2:
  DECFSZ  COUNTER, F
  GOTO  LOOP2
  RETURN


DELAY:
  MOVLW  D'10'
  MOVWF  COUNTER
LOOP3:
  DECFSZ  COUNTER, F
  GOTO  LOOP3
  RETURN
END
```