Date
Page

* Printing the equivolent ASCII value :

```
.model small
.data

msg1    db 0dh, 0ah, "Enter alphanumeric
                      charctus $"
res     db 02 dup(0)

.code

mov  ax, @data
mov  ds, ax

lea  dx, msg1
call disp

mov ah, 01h
int 21h

mov bl, al
mov cl, 4
shr, al, cl
cmp al, 0ah
JC digit

ADD AL, 07h
```

```
digit : add al, 30h
        mov res, al
        and bl, 0fh
        cmp bl, 0ah
        JC digit1
        add bl, 07h

digit1 : add bl, 30h
         mov res+1, bl
         [redacted]

         mov ah, 00h          ; TEXT MODE
         mov al, 03h          ; BIOS
          int 10h

        mov ah, 02h
        mov bh, 00h
        mov dh, 0ch
        mov dl, 26h
        int 10h

    mov res+2, '$'
     lea dx, res
    call disp
    ret
    disp endp
    end
```

* Pallindrom:

```
.model small

Display macro msg
        lea DX, msg
        mov AH, 09H
        INT 21H

ENDM

.DATA

msg1 DB 0dbh, 0ah, "Enter STRING $"
msg2 db 0dbh, 0ah, "Reverse STRING IS $"
msg3 db 0dbh, 0ah, "IS A PALLINDROME $"
msg4 db 0dbh, 0ah, "NOT A PALLINDROME $"

STRING DB 80H DUP(?)
REVSTRING DB 80H DUP(?)

.code

START : mov AX, @DATA
        mov DS, AX
        DISPLAY msg1

        mov SI, OFFSET STRING  ; LEA
                               SI, STRING

        XOR CL, CL
        [illegible]
```

```
AGAIN :  MOV AH, 01H
         INT 21H
         CMP AL, 0DH
         JE NEXT
         MOV [SI], AL
         INC SI
         INC CL
         JMP AGAIN

NEXT :   MOV [SI], BYTE PTR '$'

         DEC SI
         MOV CH, CL
         MOV DI, OFFSET RESTRING

BACK :   MOV AL, [SI]
         MOV [DI], AL
         DEC SI
         INC DI
         DEC CH

         JNZ BACK
         MOV [DI], BYTE PTR '$'
         DISPLAY MSG2
         DISPLAY RESTRING

         MOV SI, OFFSET STRING
         MOV DI, OFFSET RESTRING
```

```
AG:     MOV  AL, [SI]
        CMP  AL, [DI]

        JNE  FAIL
        INC  SI
        INC  DI
        DEC  CX

        JZ   SUCCESS

        JMP  AG

FAIL :  DISPLAY MSG4
        JMP FINAL

SUCCESS :  DISPLAY MSG3

FINAL :    MOV Ah, 4Ch
           int 21h
           END.
```