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To print ASCII value of a given input

```
. model small
. data
msg1 db 0dh, 0ah, "Enter alphanumeric character $"
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
```

```asm
        mov ah, 00h
        mov al, 03H ; Text mode
        int 10h
        mov ah, 02H   ; set the cursor pos
        mov bh, 00h   ; page number
        mov dh, 0ch   ; row (00) is top
        mov dl, 28h   ; column val

        mov res +2, '$'
        lea dx, res
        call disp
        mov ah, 4ch
        int int 21h

disp proc near
        mov ah, 09h
        int 21h
        ret
disp endp


end
```

To check whether given string is palindrome or not

```
.model small
DISPLAY MACRO MSG
     LEA DX, MSG
     MOV AH, 09H
     INT 21H
ENDM


.DATA
MSG1   DB   0DH ,  0AH ,  "Enter String: $"
MSG2   DB   0DH ,  0AH ,  " Reverse String: $"
MSG3   DB   0DH ,  0AH ,  "Input string is palindrome $"
MSG4   DB   0DH ,  0AH ,  "Input string is not palindrome $"
STRING DB 80H DUP (?)
RSTRING DB 80H DUP(?)


.CODE
START: MOV AX, @DATA
       MOV DS, AX
       DISPLAY MSG1
       ; Take the string from KBD Character by Character
       MOV SI , OFFSET STRING
       XOR CL, CL
AGAIN: MOV AH, 01H
       INT 21H
       CMP AL, 0DH
       JE NEXT
       MOV [SI], AL
       INC SI
       INC CL
       JMP AGAIN
```

```asm
NEXT: MOV [SI], BYTE PTR '$'
      ; STRIN IMPUT OVER
      DEC SI
      MOV CH, CL
      ; REVERSE TLe STRING and store in RSTRIN
      DEC SI
      MOV
      MOV DI, OFFSET RSTRING
BACK: MOV AL, [SI]
      MOV [DI], AL
      DEC SI
      INC DI
      DEC CH
      JNZ BACK
      MOV [DI], BYTE PTR '$'
      DISPLAY MSG2
      DISPLAY RSTRING
      MOV SI, OFFSET STRING
      MOV DI, OFFSET RSTRING
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
```