ASCI.ASM

LAB6: Convert an character to asscii code

```
.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

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
int 10h

mov rest+2, '$'
Lea dx,res
call disp
mov ah, 4CH
int 21h

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

PAL.Asm

LAB:4) Check whether given String is Palindrom or Not:

- Mode 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: $"
msg3 db 0DH, 0AH, "I/P String is Palindrom.$"
msg4 db 0DH, 0AH, "Not Palindrome.$"
String db 80H DUP(?)
RString db 80H DUP(?)
```

- Code

```
Start: MOV AX, @Data
       MOV DS, AX
       Display msg1
       ; Take String 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
```

```
next :  MOV [SI], Byte ptr '$'
        ; String Input Over....
         DEC  SI
        MOV  ch, CL
        ; Reverse the String and Store in
                    RString
        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
```