PALLINDROME

```
.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, "Rev string : $"
msg3 db 0DH, 0AH, "It is a pallindrome $"
msg4 db 0DH, 0AH, "It is not a pallindrome $"
string db 80H dup(?)
rstring db 80H dup(?)

.code
start: mov ax, @data
       mov ds, ax
       display msg1
       ;Take string from Keyboard char by char
        mov si, offset string
        xor cl, cl
again: mov ah, 01h
       int 21h
       cmp al, 0DH ; BMSCE ascii value of enter key
                     =0DH
       jc next ; A1 = 42 BMSCE
       mov [si], al
       inc si
       inc cl
next:  mov [si], byte ptr "$"
       ; string input over
       dec si
```

```
mov ch,cl
; Rev string & 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]    ; SMSCE, mydam
       cmp al, [di]    ; BCSMS, mydam
       jne fail
        inc si
        inc di
        JZ success
        Jmp ag
fail:  display msg4
       Jmp final
success: display msg3
 final : mov ah, 4ch
         int 21h
  end.
```