Lab 4 - Palindrome

```
.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

       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 '$'
       dec si
       mov ch, cl
        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~~ jmp ag

fail: display msg4
jmp final

success : display msg3

final : mov ah, 4ch
int 21h