LAB 5 — String Compare

```
. model small
display macro msg
        lea dx, msg
        mov ah, 09h
        int 21h
endm

. data
msg1  db  0dh, 0ah, "enter first string : $"
msg2  db  0dh, 0ah, "enter second string: $"
msg3  db  0dh, 0ah, " enter length of first string :$"
msg4  db  0dh, 0ah, " length of second string :$"
msg5  db  0dh, 0ah, " --- string equal ---$"
msg6  db  0dh, 0ah, " ---- string not equal --$"

String1 db  80h dup(?)
String2 db  80h dup(?)

. code
start : mov ax, @data
        mov ds, ax
        display msg1
        mov si, offset string1
        call readstr
        mov bl, cl
        display msg2
        mov si, offset string2
```

```asm
        call readstr
        push BX
        push cx
        display msg3
        mov al, bl
        call len   call len_dis
            display msg4
            mov al, cl
            call len_dis
            pop cx
            pop bx
            cmp cl, bl
            jne fail
            mov si, Offset string1
            mov di, Offset string2
            cld
chk :   mov al, [SI]
            cmp al, [di]
                jne fail
                inc si
                inc di
                dec cl
                jnz chk
                display msg5
                jmp final

len_dis proc near
        xor AH, AH
```

```asm
        add al, 00h
        aam
        add ax, 3030h
        mov bh, al
        mov dl, ah
        mov ah, 02h
        int 21h
        mov dl, bh
        mov ah, 02h
        int 21h
ret
len_dis endp

readstr proc near
        xor cl, cl
back : mov ah, 01h
        int 21h
        cmp al, 0dh
        je finish
        mov [si], al
        inc si
        inc cl
        jmp back
finish : mov [si], byte ptr $
        Ret
readstr endp

fail : display msg6
```

```
final: mov ah, 4ch
        int 21h
end start
```