(18)

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papergrid
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COMPARE TWO STRINGS

```
.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, " Length of First String : $"
msg4  db  0dh, 0ah, " Length of Second String : $"
msg5  db  0dh, 0ah, " Strings are EQUAL $"
msg6  db  0dh, 0ah, " Strings are 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    ; store length of first string
        display msg2
        mov si, offset string2
        call readstr
        push bx
        push cx
        display msg3
        mov al, bl
```

```
call len_dis
display msg4
mov al,cl
call len_dis
pop cx
pop bx
cmp cl,bl ; compare the lengths
jne fail  ; if lengths are equal,
            process next statement
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~~ 4h
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
lend_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
```