

IBM19C5150

SHIVANI GAHLOT

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 msg 3

mov al, bl

call len-dis

display msg 4

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 msg 5

jmp final

len-dis proc near

xor ah, ah

add al, 00h

scam

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, dh
      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
endstart

```