

```
strcomp - Notepad
File Edit Format View Help
Minimize

.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 THE LENGTH OF FIRST STRING
        DISPLAY MSG2
        MOV SI, OFFSET STRING2
        CALL READSTR
        PUSH BX
        PUSH CX

Ln 1, Col 1 100% Windows (CRLF) UTF-8
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```

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```
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]    ; COMPARE BOTH THE STRING
    CMP AL, [DI]
    JNE FAIL
    INC SI
    INC DI
    DEC CL
    JNZ CHK
    DISPLAY MSG5
    JMP FINAL
```

LEN_DIS PROC NEAR

```
XOR AH, AH
ADD AL, 00H
AAM
ADD AX, 3030H
MOV BH, AL
MOV DL, AH
```



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```
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
```



Program to compare two strings and see if they are equal or not.

.model small

display macro msg

lea dx, msg

mov ah, 09h

int 21h

endm

.data

msg1 db 0DH, 0AH "Enter first string : \$"

msg2 db 0AH, 0AH "Enter second string : \$"

msg3 db 00H, 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 the length of string

display msg2

mov sp, offset String2

call readstr

push bx

push cx

display msg3

mov al, bl

call len-dis

display msg4

mov al, cl

call Im-dis

POP CX

POP BX

cmp cl, bl ; Compare the length
JNE fail ; If length are equal, process next statement
mov SI, offset string 1
mov DI, offset string 2

add

CHK : mov AL, [SI]

cmp AL, [DI]

JNE fail

inc SB

inc DI

dec CL

JNZ chke

display msg5

jmp final

len-dis proc near

XOR AH, AH

ADD AL, OOH

AAM

add AX, 3030H

MOV BH, AL

MOV AL, AH

MOV AH, ODH

INT 21H

MOV DL, BH

MOV CH, ODH

INT 21H

RET

len-dis ~~end~~ P

Readstr proc near

XOR CL, CL

Back: mov AH, DH

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 msg

final : mov ah, 4ch

int 21h

end start.

51618 + 464926 Bytes symbol space free

0 Warning Errors
0 Severe Errors

C:\MP_LAB\MASM>link strcomp;;

Microsoft (R) Overlay Linker Version 3.60
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LINK : warning L4021: no stack segment

C:\MP_LAB\MASM>cv strcomp

ENTER FIRST STRING : sohan

ENTER SECOND STRING : steve

LENGTH OF FIRST STRING: 05

LENGTH OF SECOND STRING: 05

---STRINGS ARE NOT EQUAL---

C:\MP_LAB\MASM>