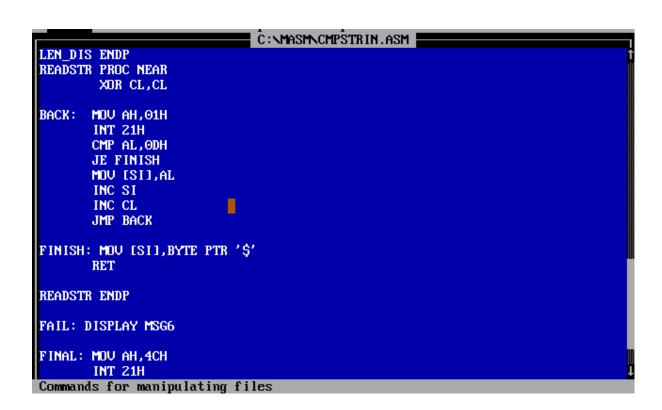```
File Edit Search View Options Help
                    C:\MASM\CMPSTRIN.ASM
.MODEL SMALL

DISPLAY MACRO MSG
        LEA DX,MSG
        MOV AH,09H
        INT 21H

ENDM

.DATA
MSG1 DB 0DH, 0AH,"ENTER THE FIRST STRING$"
MSG2 DB 0DH, 0AH,"ENTER THE SECOND STRING$"
MSG3 DB 0DH, 0AH,"LENGTH OF THE FIRST STRING:$"
MSG4 DB 0DH, 0AH,"LENGTH OF THE SECOND STRING$"
MSG5 DB 0DH, 0AH,"----STRING ARE EQUAL------ :$"
MSG6 DB 0DH, 0AH,"----STRING ARE NOT EQUAL------ :$"
STRING1 DB 80H DUP(?)
STRING2 DB 80H DUP(?)

.CODE
START: MOV AX,@DATA
       MOV DS,AX
Commands for manipulating files
```

```
File  Edit  Search  View  Options  Help
                    C:\MASM\CMPSTRIN.ASM
        DISPLAY MSG1
        MOV SI,OFFSET STRING1
        CALL READSTR
        MOV BL,CL
        DISPLAY MSG2
        MOV SI,OFFSET STRING2
        CALL READSTR
        PUSH BX
        PUSH CX
        DISPLAY MSG3
        MOV AL,BL
        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]
```

C:\MASM\CMPSTRIN.ASM

```
        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
        MOV AH,02H
        INT 21H
        MOV DL,BH
        MOV AH,02H
        INT 21H

RET
```

Commands for manipulating files

C:\MASM\CMPSTRIN.ASM

```
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
```

Commands for manipulating files

```
READSTR ENDP

FAIL: DISPLAY MSG6

FINAL: MOV AH,4CH
       INT 21H

END START
```

Commands for manipulating files

```
Microsoft (R) Macro Assembler Version 5.00
Copyright (C) Microsoft Corp 1981-1985, 1987.  All rights reserved.


  51598 + 464946 Bytes symbol space free

      0 Warning Errors
      0 Severe  Errors

C:\MASM>LINK CMPSTRINGS;;

Microsoft (R) Overlay Linker  Version 3.60
Copyright (C) Microsoft Corp 1983-1987.  All rights reserved.

LINK : warning L4021: no stack segment

C:\MASM>CMPSTRINGS

ENTER THE FIRST STRING GUN

ENTER THE SECOND STRING GUN

LENGTH OF THE FIRST STRING:04
----STRING ARE EQUAL------ :
C:\MASM>_
```

```
┌─────────────────────────local──────────────────────────┐┌─┤•│reg│↑├─┐
│┌──────────────────source1 CS:IP (ACTIVE)────────────────┤│ AX = 0000 │
│052A:0000 B83305      MOV       AX,0533                  ↑│ BX = 0000 │
│052A:0003 8ED8        MOV       DS,AX                     │ CX = 0000 │
│052A:0005 8D160000    LEA       DX,Word Ptr [0000]        │ DX = 0000 │
│052A:0009 B409        MOV       AH,09                     │ SP = 0000 │
│052A:000B CD21        INT       21                        │ BP = 0000 │
│052A:000D BEB100      MOV       SI,00B1                   │ SI = 0000 │
│052A:0010 E85B00      CALL      006E              ▊       │ DI = 0000 │
│052A:0013 8AD9        MOV       BL,CL                     │ DS = 051A │
│052A:0015 8D161900    LEA       DX,Word Ptr [0019]        │ ES = 051A │
│052A:0019 B409        MOV       AH,09                     │ SS = 0529 │
│052A:001B CD21        INT       21                        │ CS = 052A │
│052A:001D BE3101      MOV       SI,0131                   │ IP = 0000 │
│052A:0020 E84B00      CALL      006E                      │ FL = 0200 │
│052A:0023 53          PUSH      BX                        │           │
│052A:0024 51          PUSH      CX                        │ NV UP EI PL
│←                                                       →↓│ NZ NA PO NC
│┌─┤•├──────────────────command──────────────────────────↑├┐
│051A:0000  CD 20 FF 9F 00 EA FF FF-AD DE 6C 02 CD 03 32 03  . ....
│051A:0010  CD 03 4B 0A CD 03 FF 04-01 01 01 00 02 03 FF FF  ..K...
│>
```

<F8=Trace> <F10=Step> <F5=Go> <F6=Window> <F3=Display> <ESC=Cancel>

```
┌──────────────────── C:\MASM\TIME.ASM ─────────────────────┐
│.MODEL SMALL                                              ↑│
│.CODE                                                      │
│                             ▊                             │
│        MOV AH,2CH                                         │
│        INT 21H                                            │
│                                                          │
│                                                          │
│MOV AL,CH                                                 │
│AAM                                                       │
│MOV BX,AX                                                 │
│CALL DISP                                                 │
│MOV DL,':'                                                │
│MOV AH,02H                                                │
│INT 21H                                                   │
│                                                          │
│MOV AL,CL                                                 │
│AAM                                                       │
│MOV BX,AX                                                 │
│CALL DISP                                                 │
│MOV DL,':'                                                │
│MOV AH,02H                                                │
│INT 21H                                                  ↓│
```

Commands for manipulating files

```
 File    Edit    Search    View    Options    Help
========================= C:\MASM\TIME.ASM =========================
INT 21H

MOV AL,DH
AAM
MOV BX,AX
CALL DISP

MOV AH,4CH
INT 21

DISP PROC NEAR
MOV DL,DH
ADD DL,30H
MOV AH,02H
INT 21H
MOV DL,BL
ADD DL,30H
MOV AH,02H
INT 21H
RET
DISP ENDP
END
F1=Help                                        Line:43      Col:62
```

```
 File    Edit    View    Search    Run    Watch    Options    Calls                     Help
========================================= local =======================         •  reg
============================ source1 CS:IP (ACTIVE) ===========         AX = 0000
052A:0000 B42C          MOV        AH,2C                                BX = 0000
052A:0002 CD21          INT        21                                   CX = 0000
052A:0004 8AC5          MOV        AL,CH                                DX = 0000
052A:0006 D40A          AAM                                             SP = 0000
052A:0008 8BD8          MOV        BX,AX                                BP = 0000
052A:000A E82200        CALL       002F                                 SI = 0000
052A:000D B23A          MOV        DL,3A                                DI = 0000
052A:000F B402          MOV        AH,02                                DS = 051A
052A:0011 CD21          INT        21                                   ES = 051A
052A:0013 8AC1          MOV        AL,CL                                SS = 0529
052A:0015 D40A          AAM                                             CS = 052A
052A:0017 8BD8          MOV        BX,AX                                IP = 0000
052A:0019 E81300        CALL       002F                                 FL = 0200
052A:001C B23A          MOV        DL,3A
052A:001E B402          MOV        AH,02                                NV UP EI PL
052A:0020 CD21          INT        21                                   NZ NA PO NC
============================= command ==============================
051A:0000    CD 20 FF 9F 00 EA FF FF-AD DE 6C 02 CD 03 32 03    . ....
051A:0010    CD 03 4B 0A CD 03 FF 04-01 01 01 00 02 03 FF FF    ..K..
>

<F8=Trace> <F10=Step> <F5=Go> <F6=Window> <F3=Display> <ESC=Cancel>
```