

STRING COMPARE

.MODEL SMALL

DISPLAY MACRO MSG ;display msg syntax

LEA DX, MSG ;always DX

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(?) ;variables for inputs

STRING2 DB 80H DUP(?)

.CODE

START: MOV AX, @DATA

MOV DS, AX

DISPLAY MSG1

MOV SI, OFFSET STRING1 ;LEA SI,DX

CALL READSTR ;func for str inp

MOV BL, CL ; STORE THE 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 msg3, value from AL
DISPLAY MSG4
MOV AL, CL
CALL LEN_DIS      ;display msg4, value from AL
POP CX
POP BX
CMP CL, BL        ; COMPARE THE LENGTHS
JNE FAIL          ; IF LENGTHS ARE EQUAL, PROCESS NEXT STATMENT
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    ;strings are equal
      JMP FINAL

```

```

LEN_DIS PROC NEAR    ;proc for display of msg
    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

LEN_DIS ENDP


READSTR PROC NEAR

    XOR CL, CL

BACK:  MOV AH, 01H      ;inp always in AH reg

    INT 21H

    CMP AL, 0DH

    JE FINISH

    MOV [SI], AL

    INC SI

    INC CL

    JMP BACK

FINISH: MOV [SI], BYTE PTR '$' ;for display purpose

    RET

READSTR ENDP


FAIL:  DISPLAY MSG6

FINAL: MOV AH, 4CH

    INT 21H

```

```

C:\MASM>link strcomp;;

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LINK : warning L4021: no stack segment

C:\MASM>strcomp

ENTER FIRST STRING      : siddu
ENTER SECOND STRING     : rocky

LENGTH OF FIRST STRING: 05
LENGTH OF SECOND STRING: 05
---STRINGS ARE NOT EQUAL---
C:\MASM>_
END START

```

CLOCK

.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
```

```
mov al,dh
```

```
aam
```

```
mov bx,ax
```

```
call disp
```

```
mov ah,02h
```

```
int 21h
```

```
disp proc near
```

```
mov dl,bh
```

```
add dl,30h
```

```
mov ah,02h
```

```
int 21h
```

```
mov dl,bl
```

```
add dl,30h
```

```
mov ah,02h
```

```
int 21h
```

```
ret
```

```
disp endp
```

```
end
```

```
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LINK : warning L4021: no stack segment  
  
C:\MASM>clock  
17:02:05505_
```