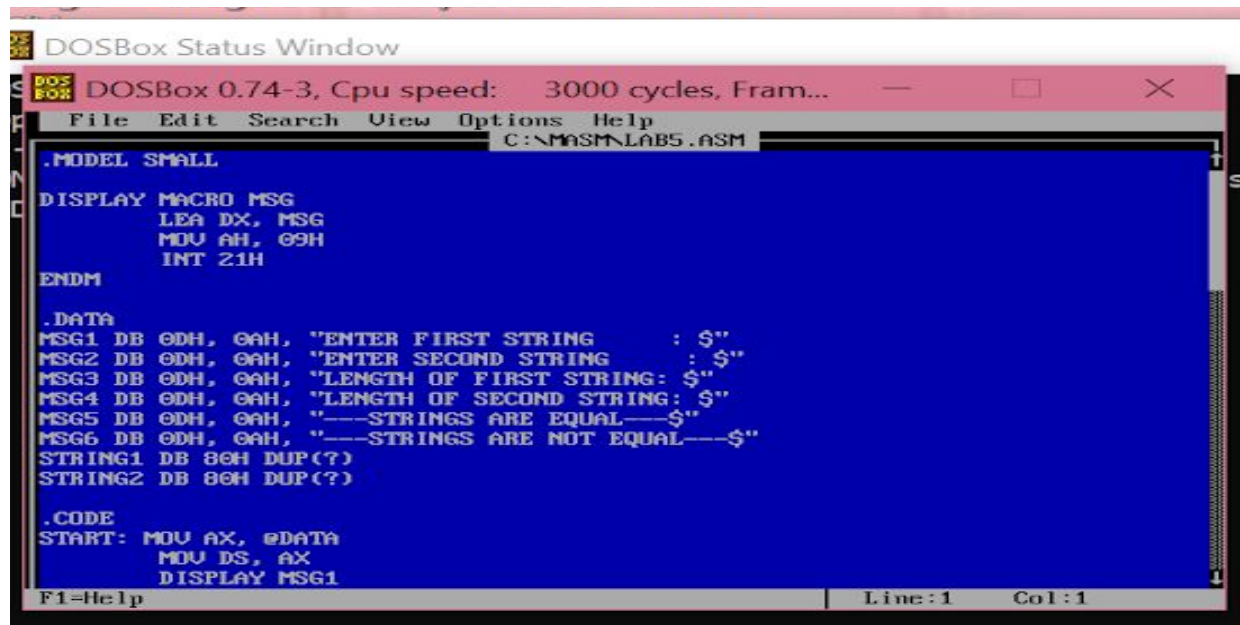


lab5: Comparison of two strings



```
DOSBox Status Window
DOSBox 0.74-3, Cpu speed: 3000 cycles, Fram...
File Edit Search View Options Help
C:\MASM\LAB5.ASM

.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

F1=Help Line:1 Col:1
```



```
DOSBox Status Window
DOSBox 0.74-3, Cpu speed: 3000 cycles, Fram...
File Edit Search View Options Help
C:\MASM\LAB5.ASM

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
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 STATMENT
MOV SI, OFFSET STRING1
MOV DI, OFFSET STRING2
CLD
CHK: MOV AL, [SI] ; COMPARE BOTH THE STRING

F1=Help Line:23 Col:39
```

DOSBox Status Window

DOSBox 0.74-3, Cpu speed: 3000 cycles, Fram...

File Edit Search View Options Help

C:\MASM\LAB5.ASM

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

F1=Help Line:45 Col:39

DOSBox Status Window

DOSBox 0.74-3, Cpu speed: 3000 cycles, Fram...

File Edit Search View Options Help

C:\MASM\LAB5.ASM

```
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
```

F1=Help Line:64 Col:39

OUTPUT:



The screenshot shows a DOSBox window titled "DOSBox Status Window". The window has a pink title bar with the text "DOSBox 0.74-3, Cpu speed: 3000 cycles, Fram...". The main content area is black with white text. The text displays the output of the Microsoft Overlay Linker Version 3.60, including a warning about a missing stack segment and two comparisons of strings "MOON" and "SUN".

```
DOSBox Status Window
DOSBox 0.74-3, Cpu speed: 3000 cycles, Fram...
Microsoft (R) Overlay Linker Version 3.60
Copyright (C) Microsoft Corp 1983-1987. All rights reserved.
LINK : warning L4021: no stack segment
C:\MASM>LAB5
ENTER FIRST STRING      : MOON
ENTER SECOND STRING     : MOON
LENGTH OF FIRST STRING: 04
LENGTH OF SECOND STRING: 04
---STRINGS ARE EQUAL---
C:\MASM>LAB5
ENTER FIRST STRING      : MOON
ENTER SECOND STRING     : SUN
LENGTH OF FIRST STRING: 04
LENGTH OF SECOND STRING: 03
---STRINGS ARE NOT EQUAL---
C:\MASM>_
```

1bm19cs216

---