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## LAB-5

### Comparing Two Strings

~~model~~

.MODEL SMALL

.DATA

STR1 DB 10H DUP(0)

STR2 DB 10H DUP(0)

LEN1 DB 00H

LEN2 DB 00H

MSG1 DB 0DH, 0AH, "Enter the first string: \$"

MSG2 DB 0DH, 0AH, "Enter the second string: \$"

MSG3 DB 0DH, 0AH, "Strings are equal \$"

MSG4 DB 0DH, 0AH, "Strings are not equal \$"

MSG5 DB 0DH, 0AH, "Length of first string is \$"

MSG6 DB 0DH, 0AH, "Length of second string is \$"

MSG7 DB 0DH, 0AH, "Length of string is \$"

.CODE

MOV AX, @DATA

MOV DS, AX

LEA DX, MSG1

MOV AH, 09H

INT 21H

MOV SI, 00

BACK1:

MOV AH, 01H

INT 21H

CMP AL, 0DH

JE NEXT1

MOV STR1[SI], AL

INC LEN1

JMP BACK1

NEXT1:

LEA DX, MSG2

MOV AH, 09H

INT 21H

MOV SI, 00

BACK2:

MOV AH, 01H

INT 21H

CMP AL, 0DH

JE NEXT2

MOV STR2[SI], AL

INC SI

INC LEN2

JMP BACK2

NEXT2:

MOV AL, LEN1

CMP AL, LEN2

JNE NOTEQUAL

MOV SI, 00

MOV DI, 00

MOV CL, LEN1

BACK3:

MOV AL, STR1[SI]

CMP AL, STR2[DI]

JNE NOTEQUAL

INC SI

INC DI

DEC CL

JNE BACK3

```
LEA DX, MSG3
MOV AH, 09H
INT 21H
```

```
LEA DX, MSG7
MOV AH, 09H
INT 21H
MOV DL, 30H
MOV AH, 02H
INT 21H
JMP LAST
```

NOT EQUAL: 0

```
LEA DX, MSG4
MOV AH, 09H
INT 21H
```

```
LEA DX, MSG5
MOV AH, 09H
INT 21H
```

```
MOV DL, LEN1
ADD DL, 30H
MOV AH, 02H
INT 21H
```

```
LEA DX, MSG6
MOV AH, 09H
INT 21H
MOV DL, 0
ADD DL, LEN2
ADD DL, 30H
MOV AH, 02H
INT 21H
```

```
LAST: MOV AH, 4CH  
      INT 21H  
      END.
```