Lab-5

```
. model small
. data
    ~~data db~~
    STR1 DB B10H DUP(0)
    STR2 DB 10M DUP(0)
    LEN1 DB 00H
    LEN2 DB 00H
    MSG1 DB 0DH, 0AAH, "ENTER FIRST STRING:"$"
    MSG2 DB 0DH, 0AH, 'ENTER SECOND STRING:$"
    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
    INT 21H
    MOV SI, 00
```

```
BACK 1:
        MOV AH, 01H
        INT 21H
        CMP AL, 0DH
        JE NEXT1
        JMP BACK1


NEXT1:
        LEA DX, MSG2
        INT 21H
        MOV SI, 00

BACK2:
        MOV AH, 01H
        INT 21H
        CMP AL, 0DH
        JE NEXT2
        MOV STR 2[SI], AL
        INC SI
        INC LEN 2
        JMP BACK2
```

```
NEXT2:
        MOV AL, LEN1
        CMP AL, LEN2
        JNE NOTEQUAL
        MOV CL, LEN1

BACK3:
        MOV AL, STR1[SI]
        CMP AL, STR2[DI]
        JNE NOTEQUAL
        INC SI
        DEC CL

        LEA DX, MSG3
        INT 21H

        LEA DX, MSG7
        INT 21H
        MOV DL, LEN1
        INT 21H
        JMP LAST

NOTEQUAL:
        LEA DX, MSG4
        MOV AH, 09H
```

```
        INT 21H

    LEA DX, MSG5
        MOV AH, 09H

        MOV DL, LEN1
        INT 21H

    LEA DX, MSG6
        INT 21H
        MOV DL, LEN2
        MOV AH, 02H
        INT 21H

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

```
C:\MASM>LINK LAB5;;

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LINK : warning L4021: no stack segment

C:\MASM>LAB5

ENTER FIRST STRING: HELLO

ENTER SECOND STRING: HELLO

STRINGS ARE EQUAL
LENGTH OF STRING IS 5
C:\MASM>LAB5

ENTER FIRST STRING: HI

ENTER SECOND STRING: HELLO

STRINGS ARE NOT EQUAL
LENGTH OF FRIST STRING IS 2
LENGTH OF SECOND STRING IS 5
C:\MASM>_
```