LAB PROGRAM - 5

11-11-2019

```
.model small
.data
str1 db 10 dup (0)
str2 db 10 dup (0)
len1 db 00
len2 db 00
msg1 db 0dh,0ah,"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
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 si
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

; when length of both strings are equal
        that is len1 = len2
        mov si, 00
        mov di, 00
        mov cl, len1 ; mov cl, len2
back3 : mov al, str1 [si]
        cmp al, str2 [di]
        Jne notequal
        inc si
        inc di ;  can use cld
        dec cl
        Jnz back3 : Can use loop statement
```

```
lea dx, msg3
mov ah, 09h
int 21h

lea dx, msg7
mov ah, 09h
int 21h

mov dl, len1 ; mov dl, len2
add dl, 30h
mov ah, 02h
int 21h
Jmp last

notequal : 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, len2
        add dl, 30h
        mov ah, 02h
        int 21h

last :  mov ah, 4ch
        int 21h
end
```