PROGRAM - 5

Comparing two strings

```
. 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
```

```asm
        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 string are
                         ; equal that is len1 = len2.

        mov   si, 00
        mov   di, 00
        mov   cl, len1        ; mov cl, len2


back3:  mov   al, string1[si]
        cmp   al, string2[di]
        jne   notequal
        inc   si
        inc   di        ; can use cld
        dec   cl
        jnx   back3 ; can use loop statement.
```

```
lea   dx , msg 3
mov   ax , 09h
int   21 h
lea   dn , msg7
mov   ah , 09h
int   21 h


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


lea  dx , msg4
mov  ah , 09h
int  21h


lea  dx , msg5
mov d ah , 09h
int  21 h
mov  dl , len 1
add  dl , 30h
mov  ah , 02h
int  21 h


lea  dx , msg6
mov  ah , 09h
int  21h
mov  dl , len2
mov  ah , 02h
int  21 h
last:  mov ah , 4ch
       int  21h
       end
```