

LAB PROGRAM AM-5

* 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}~~Enter~~ 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, 0ah

int 21h

mov si, 00

back1: mov ah, 01h

int 21h

cmp ax, 0dh

je next,

mov str[si], al

inc si

inc len1

jmp back1

```
next 1: lea dx, msg2
        mov ah, 09h
        int 21h
        mov si, 00
```

```
back 2: mov ah, 0ah
        int 21h
        cmp al, 0dh
        je next 2
        mov str2[si], al
        inc si
        inc len 2
        jmp back 2
```

```
next 2: mov al, len 1
        cmp al, len 2
        jne not equal
```

; when length of both strings are equal
that is $len 1 = len 2$

```
        mov si, 00
        mov di, 00
        mov cl, len 1; mov cl, len 2
back 3: mov al, str1[si]
        cmp al, str2[di]
        jne not equal
        inc si
        inc di, can use cld
        dec cl
```

jnz back 3 ; can use loop statement

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

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

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

```
hobequal: lea dx, msg4  
mov ah, 09h  
int 21h
```

```
lea dx, msg5  
mov ah, 09h  
int 21h
```

```
mov di, len1  
add di, 30h  
mov ah, 02h  
int 21h
```

```
lea dx, msg6  
mov ah, 09h  
int 21h
```

```
mov di, len2  
add di, len2  
mov ah, 02h  
int 21h
```

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