

## Program to compare two strings

```
.model small
.stack 100h
.data
Msg1 DB "Name: $"
Msg2 DB "Microprocessor: $"
EqualMsg DB "The strings are equal$"
NotEqualMsg DB "The strings are not equal$"
.code
Mov ax, @data
Mov ds, ax
```

```
Lea si, Msg1 ; Load address of Msg1 into SI
Lea di, Msg2 ; Load address of Msg2 into DI
```

Repeat:

Lodsb; o load a byte from the source string (Msg1) into the AL register, and then compares it with a byte from the destination string (Msg2) using CMPSB

Cmpsb ; Compare a byte from [SI] with a byte from [DI], and increment SI and DI

Jne NotEqual ; If the bytes are not equal, jump to NotEqual label

Test al, al ; Check if the end of the string has been reached  
Jnz Repeat ; If not, repeat the loop

Equal:

Lea dx, EqualMsg ; Load the address of EqualMsg into DX  
Jmp DisplayMsg ; Jump to the DisplayMsg subroutine

NotEqual:

Lea dx, NotEqualMsg ; Load the address of NotEqualMsg into DX

DisplayMsg:

Mov ah, 09h ; Set the function code for string output  
Int 21h ; Call the DOS interrupt to display the appropriate

message

Mov ah, 4ch ; Set the function code for program termination  
Int 21h ; Call the DOS interrupt to terminate the program  
End