

# Palindrome

ARYAN

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```
model small
display msg
lea dx, msg
mov ah, 09h
int 21h
Endm
```

data

```
Msg1 db 0dh, 0ah, "Enter string: $"
Msg2 db 0dh, 0ah, "Reverse string: $"
Msg3 db 0dh, 0ah, "Input string is palindrome $"
Msg4 db 0dh, 0ah, "Input string is not a palindrome $"
```

```
String db 80h dup(?)
```

```
Reverse db 80h dup(?)
```

code

Start:

```
Mov ax, @data
```

```
mov ds, ax
```

```
display msg 1
```

```
mov si, offset String
```

```
XOR CL, CL
```

again:

mov ah, 01h

int 21h

cmp al, 0dh

Je next

mov [si], al

inc si

inc ~~edx~~ d

jmp again

next:

mov [si], Byte ptr '\$'

dec si

mov ch, cl

mov di, offset string

back:

mov al, [si]

mov [di], al

dec si

inc di

dec ch

jnz back

mov [di], Byte ptr '\$'

display msg2  
display xstring  
mov si, offset string  
mov di, offset ~~string~~ xstring

AG:

```
mov al, [si]
mov cmp al, [di]
JNE FAIL
INC SI
INC DI
DEC CX
JE SUCCESS
Jmp Ag.
```

Fail: display msg 4  
jmp final

Success: Display msg 3

final: mov ah, 4ch  
int 21h

END