

PALLINDROME

④ .model small

```
display macro msg
lea     DX, msg
MOV     AH, 09H
INT     21H
```

END m

• Data

```
msg 1 DB 0DH, 0AH, "Enter String: $"
msg 2 DB 0DH, 0AH, "Reverse String: $"
msg 3 DB 0DH, 0AH, "Input String is palindrom $"
msg 4 DB 0DH, 0AH, "not a palindrome. $"
```

```
string DB 80H DUP(?)
```

```
reverse string DB 80H DUP(?)
```

• Code

```
start : mov ax, @data
        mov ds, ax
        Display msg 1
        mov SI, offset string
        xor     CI, CI
```

Again : MOV AL, 00H
INT 21H
CMP AL, 0DH ; Ac bonus value
JE NEXT
MOV [SI], AL
INC SI
INC CL

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 msg ;
display string
MOV SI, offset string
MOV DI, offset string

AG : MOV AL, [SI]
CMP AL, [DZ]
JNE FAIL
INC SI
INC DI
DEC CX
JZ SUCCESS

IMP AG :

FAIL : Display msg 4
Imp final

Success : Display msg 3
FINAL : Nov AH, 4CH.
INT 21H

END

Input : madam
Output : is a palindrome

DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Pr...

51574 + 464970 Bytes symbol space free

0 Warning Errors

0 Severe Errors

C:\MASM>link palindro.;

Microsoft (R) Overlay Linker Version 3.60

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LINK : warning L4021: no stack segment

C:\MASM>palindro

enter a string mam

string is palindrome

C:\MASM>palindro

enter a string shivanshu

string is not palindrome

C:\MASM>

(dell)