ASCII: .model small .data msg1 db 0dh,0ah , "Enter the Element \$" res db 02 dup(0) .code mov ax,@data mov ds,ax lea dx,msg1 call disp mov ah,01h int 21h mov bl,al mov cl,04 shr al,cl cmp al,0ah jc digit add al,07h digit: add al,30h mov res ,al and bl,0fh cmp bl,0ah jc digit1

```
add bl,07h
digit1:
add bl,30h
mov res+1,bl
mov ah,00h
mov al,03h
int 10h
mov ah,02h
mov bh,00h
mov dh,0ch
mov dl,25h
int 10h
mov res+2 , '$'
lea dx,res
call disp
mov ah,4ch
int 21h
disp proc near
lea dx,res
call disp
mov ah,09h
int 21h
ret
disp endp
end
```

PALLINDROM: .model small display macro msg lea dx,msg mov ah,09h int 21h endm .data msg1 db 0dbh,0ah , " Enter STRING $\$ " msg2 db 0dbh,0ah , " Reverse String \$" msg3 db 0dbh,0ah , " this is Palindrom $\$ " msg4 db 0dbh,0ah , " not a plaindrom \$" string db 80h dup(?) restring db 80h dup(?) .code start: mov ax,@data mov ds,ax display msg1 mov si,offset string xor cl,cl

again:

mov ah,01h
int 21h
cmp al,0dh
je next
MOV [SI],AL
inc si
inc cl
jmp again
next:
mov[si],byte ptr '\$'
dec si
mov ch,cl
mov di,offset restring
back:
mov al,[si]
mov [di],al
dec si
inc di
dec ch
jnz back
mov [di],byte ptr '\$'
display msg2
display restring
mov si,offset string
mov di,offset restring

ag:

mov al,[si]
cmp al,[di]
jne fail
inc si
inc di
dec cx
jz success
jmp ag
fail:
display msg4
jmp final
success:
display msg3
final:
mov ah,4ch
int 21h
end

```
0 Warning Errors
0 Severe Errors

C:\MASM\link pall;;

Microsoft (R) Overlay Linker Version 3.60

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LINK: warning L4021: no stack segment

C:\MASM\pall

Enter STRING siddu

Reverse String uddis not a plaindrom

C:\MASM\pall

Enter STRING madam

Reverse String madam

this is Palindrom

C:\MASM\>
```