

# Program 4

To check whether a given string is palindrome or not

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.model small

```
display macro msg
lea dx, msg
mov ah, 09h
int 21h
endm
```

.data

```
msg1 db 0dh, 0ah, "enter a string :- $"
msg2 db 0dh, 0ah, "entered string is palindrome $"
msg3 db 0dh, 0ah, "entered string is not a palindrome $"
str db 10h dup(0)
revstr db 10h dup(0)
len dw 0
```

.code

```
mov ax, @data
mov ds, ax
```

```
display msg1
```

```
mov si, 00h
```

```
back1: mov ah, 01h
int 21h
```

```
cmp al, 0dh
jz next
```



```

mov str[si], al
inc si
inc len
jmp back1

```

```

next: mov si, 00h
mov di, 00h
add di, len
dec di
mov cx, dx len

```

```

back2: mov al, str[si]
      mov revstr[di], al
      inc si
      dec di
loop back2

```

```

mov cx, len
mov si, 00h
mov di, 00h
cld

```

```

back3: mov bl, str[si]
      cmp bl, revstr[di]
      jnz notpali
      loop back3
      display msg2
      jmp last

```

```

notpali: display msg3
last: mov ah, 4ch
int 21h
end.

```