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BRANCH :- Comps -B. **BRANCH:** B.

EXPERIMENT 5: To check given string is palindrome or not.

SUBJECT :- CAO (COMPUTER ARCHITECTURE AND ORGANIZATION)

CODE :-

data segment

msg1 db 10,13,"Enter String: \$"

msg2 db 10,13,"It is a palindrome \$"

msg3 db 10,13,"It is not a palindrome \$"

str1 db 50 dup(0)

data ends

code segment

assume cs:code, ds:data

start:

mov ax, data

mov ds, ax

lea si, msg1

mov ah, 09h

int 21h

lea si, str1

lea di, str1

mov ah, 01h

next:

int 21h

cmp al,0dh

je terminate

mov[di], al

inc di

jmp next

terminate:

mov al,"\$"

mov[di], al

xyz:

dec di

mov al,[si]

cmp[di],al

jne notpalin

inc si

cmp si, si

jl xyz

palin:

mov ah, 09h

lea dx, msg2

int 21h

jmp last

notpalin:

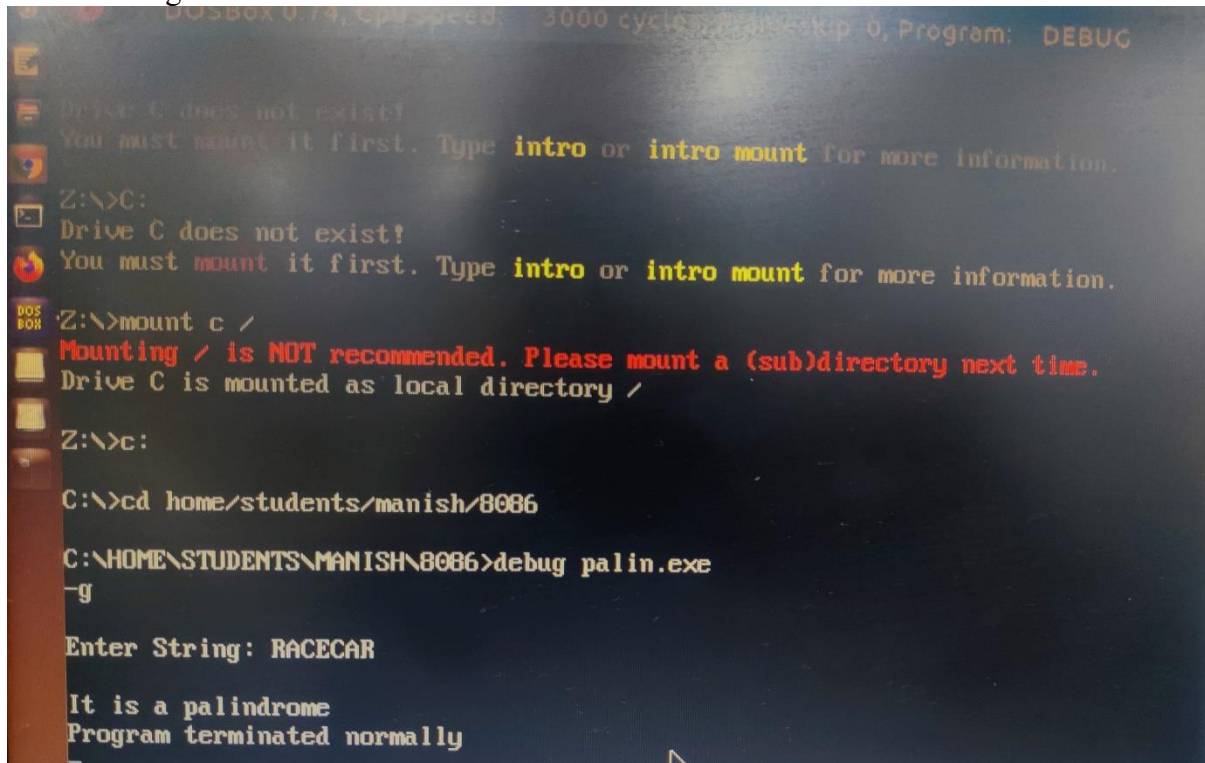
```
mov ah,09h
lea dx, msg3
int 21h
```

last:

```
mov ah, 4ch
int 21h
code ends
end start
```

OUTPUT :-

- String is Palindrome:

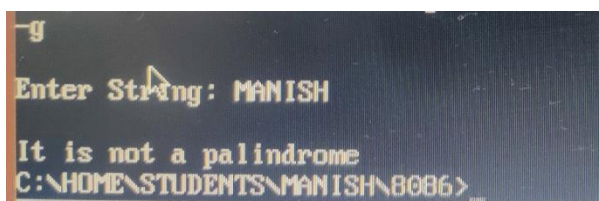


```

DOSBox 0.74, CPU speed: 3000 cycles/frame skip 0, Program: DEBUG
Drive C does not exist!
You must mount it first. Type intro or intro mount for more information.
Z:\>C:
Drive C does not exist!
You must mount it first. Type intro or intro mount for more information.
Z:\>mount c /
Mounting / is NOT recommended. Please mount a (sub)directory next time.
Drive C is mounted as local directory /
Z:\>c:
C:\>cd home/students/manish/8086
C:\HOME\STUDENTS\MANISH\8086>debug palin.exe
-g
Enter String: RACECAR
It is a palindrome
Program terminated normally

```

- String is not palindrome:



```

-g
Enter String: MANISH
It is not a palindrome
C:\HOME\STUDENTS\MANISH\8086>

```

Conclusion: Hence by completing this experiment I came to know how to check whether the string is palindrome or not.