## **EXPERIMENT N0-3**

Aim: Write an ALP to reverse a string.

## **CODE**:

```
data segment
msg1 db 0dh, 0ah, "Enter the string:$"
msg2 db 0dh, 0ah, "Reverse string is $"
data ends
code segment
assume cs:code, ds:data
start:
      mov ax,data
    mov ds,ax
    mov di,4000h
      mov dx,offset msg1
      mov ah,09h
    int 21h
      mov cl,00h
L1:
      mov ah,01h
    int 21h
    mov [di],al
      inc di
      inc cl
      cmp al,0dh
      jnz L1
      sub di,02h
```

```
dec cl
      mov dx,0000h
      mov dx, offset msg2
      mov ah,09h
      int 21h
L2:
      mov dl, [di]
      mov ah,02h
      int 21h
      dec di
      dec cl
     jnz L2
      mov ah,4ch
      int 21h
code ends
end start
```

## **OUTPUT:**

```
DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX

Invoking: ML.EXE /1. /Zm /c /Ta exp3.asm

Microsoft (R) Macro Assembler Version 6.11
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Assembling: exp3.asm

C:\MASM\BIN\link exp3.obj

Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992
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Run File [exp3.exe]:
List File [nul.map]:
Libraries [.lib]:
Definitions File Inul.def]:
LINK: warning L4021: no stack segment

C:\MASM\BIN\exp3

Enter the string:mumbai

Reverse string is iabmum
C:\MASM\BIN\exp3
```