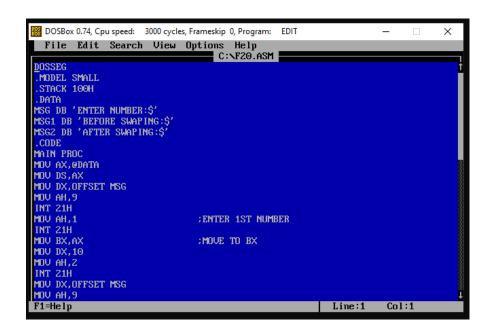
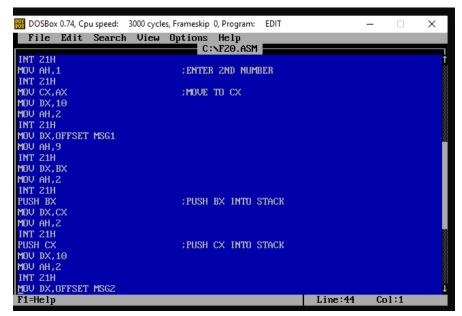
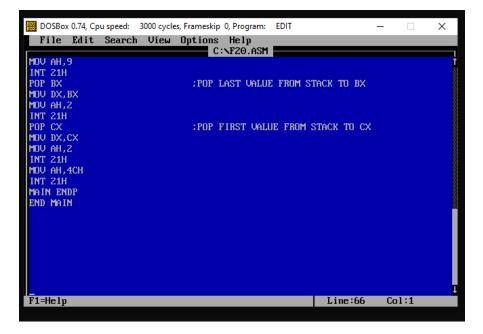
SEAT NO: B21110006167

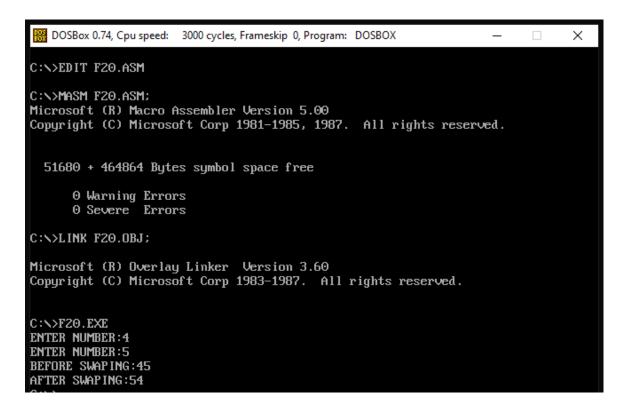
## PROGRAM TO SWAP TWO NUMBERS:

```
DOSSEG
.MODEL SMALL
.STACK 100H
MSG DB 'ENTER NUMBER:$'
MSG1 DB 'BEFORE SWAPING:$'
MSG2 DB 'AFTER SWAPING:$'
.CODE
MAIN PROC
MOV AX, @DATA
MOV DS, AX
MOV DX,OFFSET MSG
MOV AH, 9
INT 21H
MOV AH, 1
                               ;ENTER 1ST NUMBER
INT 21H
MOV BX, AX
                               ; MOVE TO BX
MOV DX,10
MOV AH, 2
INT 21H
MOV DX, OFFSET MSG
MOV AH, 9
INT 21H
MOV AH, 1
                               ;ENTER 2ND NUMBER
INT 21H
MOV CX, AX
                               ; MOVE TO CX
MOV DX,10
MOV AH, 2
INT 21H
MOV DX, OFFSET MSG1
MOV AH, 9
INT 21H
MOV DX, BX
MOV AH, 2
INT 21H
PUSH BX
                               ; PUSH BX INTO STACK
MOV DX,CX
MOV AH, 2
INT 21H
PUSH CX
                                ; PUSH CX INTO STACK
MOV DX, 10
MOV AH, 2
INT 21H
MOV DX, OFFSET MSG2
MOV AH, 9
INT 21H
                                ; POP LAST VALUE FROM STACK TO BX
POP BX
MOV DX, BX
MOV AH, 2
INT 21H
POP CX
                                ; POP FIRST VALUE FROM STACK TO CX
MOV DX,CX
MOV AH, 2
INT 21H
MOV AH, 4CH
INT 21H
MAIN ENDP
END MAIN
```









SEAT NO: B21110006167

## PROGRAM TO RESERVE A STRING:

DOSSEG

.MODEL SMALL

.STACK 100H

MSG1 DB 'STRING:\$'

MSG2 DB 'REVERSE STRING:\$'

STRING DB 'ABC\$'

.CODE

MAIN PROC

MOV AX, @DATA

MOV DS, AX

MOV DX,OFFSET MSG1 ; PRINT MESSAGE 1

MOV AH, 9

INT 21H

MOV DX,OFFSET STRING ; PRINT STRING

MOV AH, 9 INT 21H MOV DX,10 MOV AH, 2

INT 21H

MOV DX,OFFSET MSG2 ; PRINT MESSAGE 2

MOV AH, 9 INT 21H

MOV SI, OFFSET STRING ; SEND SI TO FIRST ADDRESS OF STRING

; SET COUNTER ACCORDING TO LENGTH MOV CX,3

L1:

MOV BX,[SI] ; MOVE ELEMENT TO BX PUSH BX ; PUSH BX INTO STACK

INC SI

LOOP L1 ;LOOP CALL

MOV CX,3 ; SET COUNTER ACCORDING TO LENGTH

L2:

POP DX ; POP ELEMENT FROM STACK

MOV AH, 2 INT 21H

LOOP L2 ;LOOP CALL

MOV AH, 4CH INT 21H MAIN ENDP END MAIN





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

C:\>EDIT F19.ASM

C:\>MASM F19.ASM;
Microsoft (R) Macro Assembler Version 5.00

Copyright (C) Microsoft Corp 1981-1985, 1987. All rights reserved.

51642 + 464902 Bytes symbol space free

0 Warning Errors
0 Severe Errors

C:\>LINK F19.0BJ;

Microsoft (R) Overlay Linker Version 3.60

Copyright (C) Microsoft Corp 1983-1987. All rights reserved.

C:\>F19.EXE

STRING:ABC

REVERSE STRING:CBA
```

SEAT NO: B21110006167

## PROGRAM TO INPUT A STRING AND REVERSE IT:

DOSSEG .MODEL SMALL .STACK 100H .DATA MSG1 DB 'ENTER STRING:\$' MSG2 DB 'REVERSE STRING:\$' STRING DB 100 DUP('\$') .CODE MAIN PROC MOV AX, @DATA MOV DS, AX MOV DX, OFFSET MSG1 MOV AH, 9 INT 21H MOV SI, OFFSET STRING STRING LOOP: ;LOOP FOR INPUT STRING MOV AH, 1 INT 21H CMP AL,13 ; COMPARE STATEMENT JE STRING\_PRINT ; CONDITIONAL JUMP MOV [SI],AL ; MOVE AL VALUE TO SI INC SI ; INCREMENT SI JMP STRING LOOP ;UNCONDITIONAL JUMP STRING\_PRINT: MOV DX,OFFSET MSG2 MOV AH, 9 INT 21H MOV BX, '#' PUSH BX MOV SI, OFFSET STRING ;LOOP FOR PUSH INTO STACK L1: MOV BX, [SI] CMP BL,'\$' ; COMPARE STATEMENT JE L2 ; CONDITIONAL JUMP PUSH BX INC SI JMP L1 ;UNCONDITIONAL JUMP ;LOOP FOR POP FROM STACK L2: POP DX CMP DX, '#' ; COMPARE STATEMENT JE L3 ; CONDITIONAL JUMP MOV AH, 2 INT 21H JMP L2 ;UNCONDITIONAL JUMP L3: MOV AH, 4CH INT 21H MAIN ENDP END MAIN



