

NAME: ZEHRA MOHAMMAD TAQI  
SEAT NO: B21110006167

# CODE USING PROCEDURE AND MACRO:

```
PRINT MACRO P1                                ;MACRO STRUCTURE
MOV DX,OFFSET P1
MOV AH,9
INT 21H
ENDM

.MODEL SMALL
.STACK 100H
.DATA
MSG1 DB 'ENTER FIRST NAME:'
STR1 DB 100 DUP('$')
MSG2 DB 'ENTER LAST NAME:'
STR2 DB 100 DUP('$')

.CODE
MAIN PROC
MOV AX,@DATA
MOV DS,AX
PRINT MSG1                                ;MACRO CALL
MOV SI,OFFSET STR1
FIRST:                                    ;LOOP FOR FIRST NAME
MOV AH,1
INT 21H
CMP AL,13
JE L1
MOV [SI],AL
INC SI
JMP FIRST

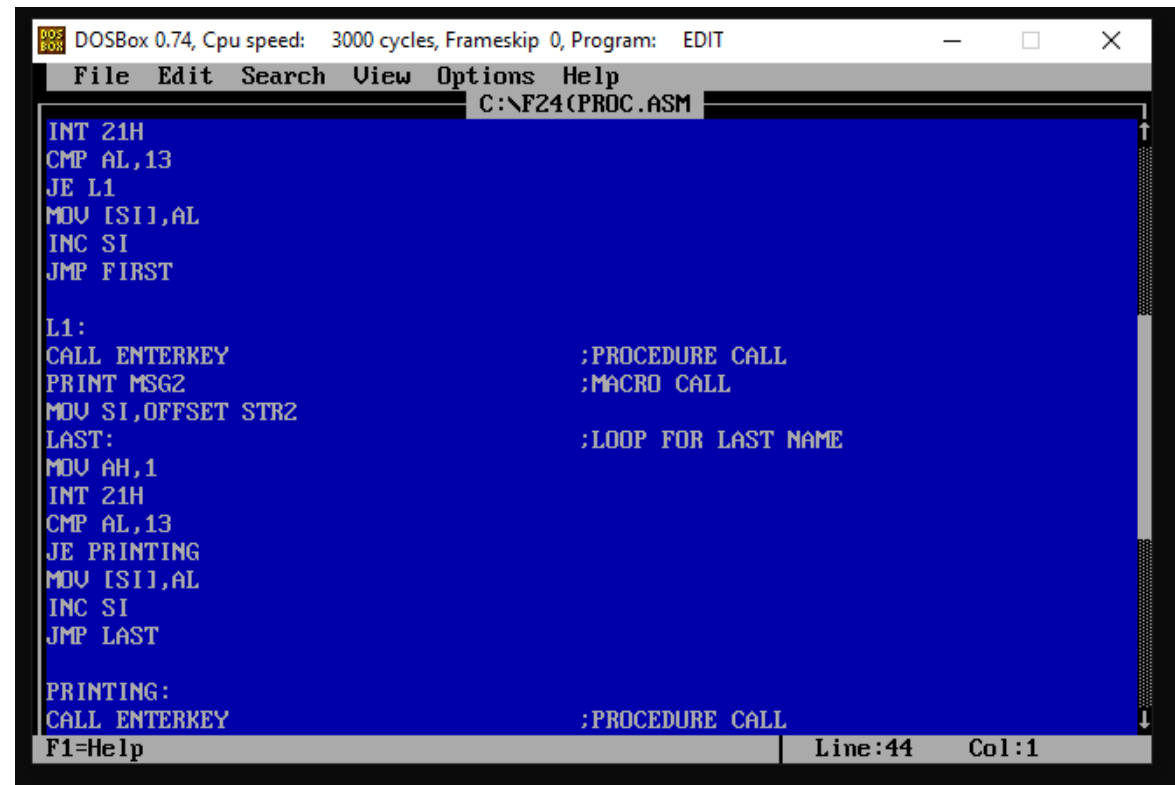
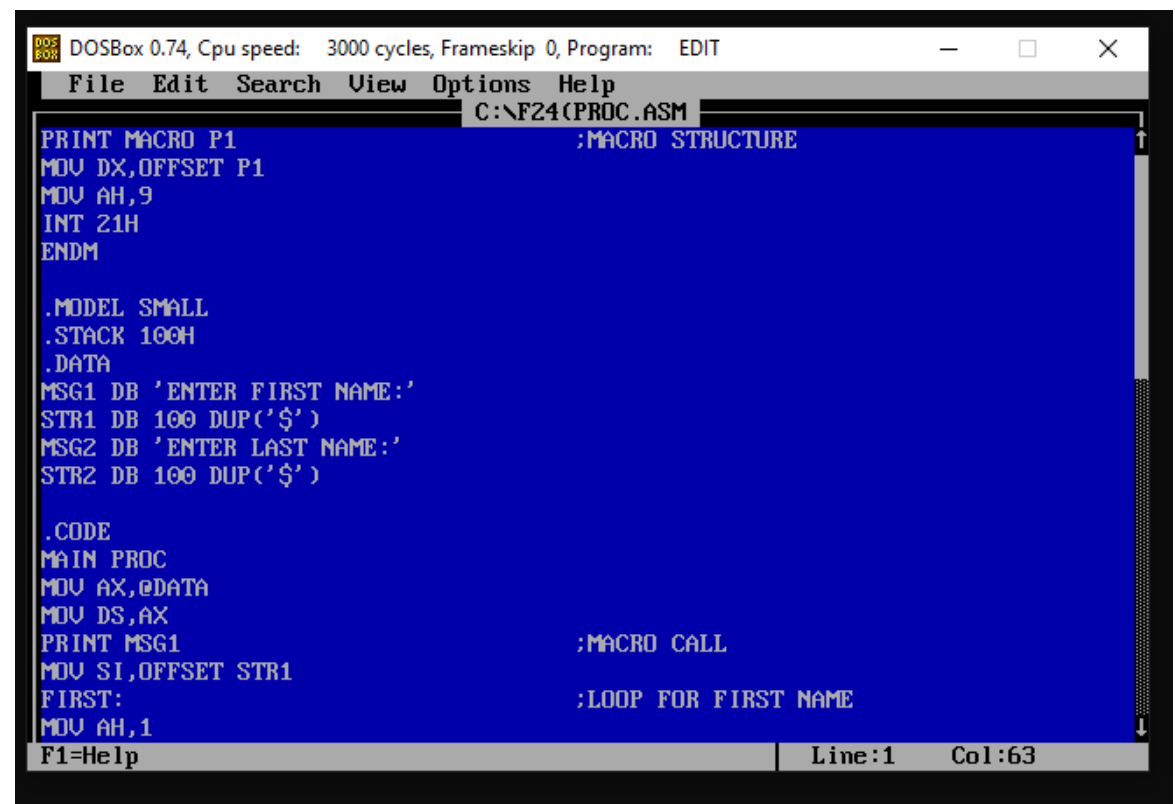
L1:
CALL ENTERKEY                                ;PROCEDURE CALL
PRINT MSG2                                ;MACRO CALL
MOV SI,OFFSET STR2
LAST:                                    ;LOOP FOR LAST NAME
MOV AH,1
INT 21H
CMP AL,13
JE PRINTING
MOV [SI],AL
INC SI
JMP LAST

PRINTING:
CALL ENTERKEY                                ;PROCEDURE CALL
PRINT STR1                                ;MACRO CALL
MOV DX,' '
MOV AH,2
INT 21H
PRINT STR2                                ;MACRO CALL
MOV AH,4CH
INT 21H
MAIN ENDP

ENTERKEY PROC                                ;PROCEDURE STRUCTURE
MOV DX,10
MOV AH,2
INT 21H
MOV DX,13
```

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```
MOV AH,2  
INT 21H  
RET  
ENTERKEY ENDP  
END MAIN
```



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DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: EDIT

File Edit Search View Options Help

C:\F24(PROC.ASM

```
PRINT STR1                                ;MACRO CALL
MOV DX,' '
MOV AH,2
INT 21H
PRINT STR2                                ;MACRO CALL
MOV AH,4CH
INT 21H
MAIN ENDP

ENTERKEY PROC                            ;PROCEDURE STRUCTURE
MOV DX,10
MOV AH,2
INT 21H
MOV DX,13
MOV AH,2
INT 21H
RET
ENTERKEY ENDP
END MAIN
```

F1=Help | Line:66 Col:1

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

C:\>EDIT F24(PROC&MAC).ASM

C:\>MASM F24(PROC&MAC).ASM;

Microsoft (R) Macro Assembler Version 5.00

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51626 + 464918 Bytes symbol space free

0 Warning Errors

0 Severe Errors

C:\>LINK F24(PROC&MAC).OBJ;

Microsoft (R) Overlay Linker Version 3.60

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C:\>F24(PROC&MAC).EXE

ENTER FIRST NAME:ZEHRA

ENTER LAST NAME:MEETHAWALA

ZEHRA MEETHAWALA

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## WHY DO WE USE PROCEDURE AND MACRO?

SINCE I WROTE A CODE FOR INPUT FIRST AND LAST NAME, I USED MACRO TO PRINT MESSAGES AND NAMES, AND PROCEDURE FOR ENTERKEY. BECAUSE OF MACRO AND PROCEDURE, I DIDN'T HAVE TO WRITE THE COMPLETE BLOCK OF CODE FOR EVERY INSTRUCTION, I JUST CALLED THEM IN THE CODE.