

EXPERIMENT N0-6

AIM: Write ALP to convert BCD number to its Hexadecimal equivalent.

CODE:

DATA SEGMENT

MSG1 DB "ENTER THE NUMBER:\$"

MSG2 DB 0AH, "THE NO. IN HEXADECIMAL IS\$"

ABC DW?

DATA ENDS

DATA SEGMENT

ASSUME CS:CODE,DS:DATA

START:MOV AX,DATA

MOV DS,AX

MOV DX,OFFSET MSG1

MOV AH,09H

INT 21H

L1:

MOV AH,01H

INT 21H

SUB AL,30H

MOV [SI],AL

INC SI

ADD AL,30H

CMP AL,0DH

JNE L1

MOV AL,[SI-3]

MOV BL,0AH

MUL BL

MOV DL,[SI-2]

MOV DH,00H

ADD AX,DX

MOV ABC,AX

MOV DX,OFFSET MSG2

MOV AH,09H

INT 21H

MOV CL,04H

MOV AX,ABC

LOOP 1:

MOV DX,00H

MOV BX,10H

DIV BX

CMP DX,000AH

JNAE L2

ADD DX,0007H

L2:ADD DX, 0030H

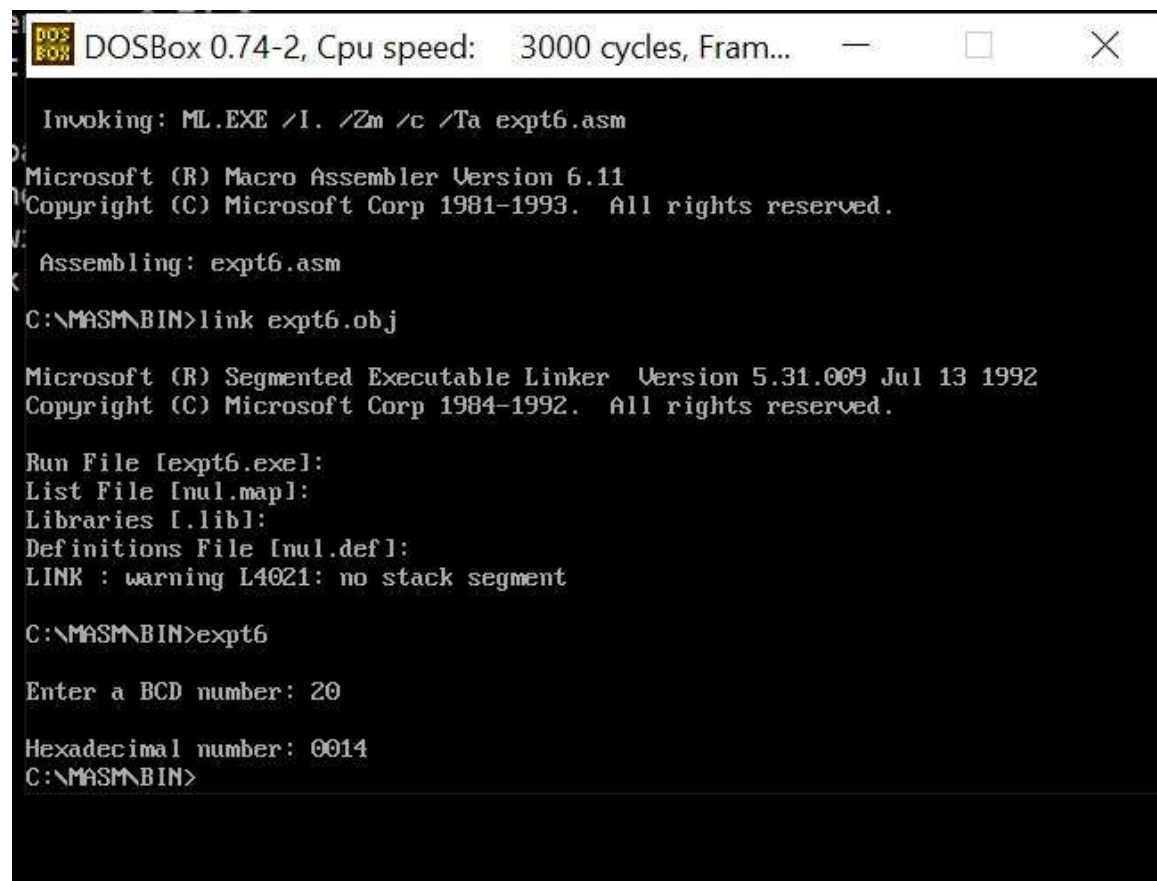
PUSH DX

DEC CL

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JNZ LOOP1
MOV CL,04H

DISP: POP DX
MOV AH,02H
INT 21H
DEC CL
JNZ DISP
MOV AH,4CH
INT 21H
CODE ENDS
END START
```

OUTPUT:



```
DOS
BOX DOSBox 0.74-2, Cpu speed: 3000 cycles, Fram...
Invoking: ML.EXE /I. /Zm /c /Ta expt6.asm
Microsoft (R) Macro Assembler Version 6.11
Copyright (C) Microsoft Corp 1981-1993. All rights reserved.
Assembling: expt6.asm
C:\MASM\BIN>link expt6.obj
Microsoft (R) Segmented Executable Linker Version 5.31.009 Jul 13 1992
Copyright (C) Microsoft Corp 1984-1992. All rights reserved.
Run File [expt6.exe]:
List File [nul.map]:
Libraries [.lib]:
Definitions File [nul.def]:
LINK : warning L4021: no stack segment
C:\MASM\BIN>expt6
Enter a BCD number: 20
Hexadecimal number: 0014
C:\MASM\BIN>
```