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Class:-S.E Computer  
Roll No:-45  
Batch:-B2  
Experiment No:-4  
Title:- Multiplication Program ,using Near Procedure.  
Aim:-8086 Assembly language Program for Multiplicatin of two 8-bit HEX numbers using NEAR Procedure.

DATA SEGMENT

```
NO1 DB 67H
NO2 DB 45H
HEX_CHART DB '0123456789ABCDEF'
LSB_OF_RESULT DB ?
MSB_OF_RESULT DB ?
H_ATTACH DB 'H'
MSG DB 'RESULT IS :-$'
```

DATA ENDS

CODE SEGMENT

```
ASSUME CS:CODE,DS:DATA
```

```
MOV AX,DATA
MOV DS,AX
```

```
LEA DX,MSG
MOV AH,09H
INT 21H
```

```
MOV AL,NO1
MOV BH,NO2
MUL BH
```

```
MOV MSB_OF_RESULT,AH
MOV LSB_OF_RESULT,AL
```

```
MOV AL,MSB_OF_RESULT
AND AL,0F0H
MOV CL,04H
ROR AL,CL
CALL DISP_CHAR
```

```
MOV AL,MSB_OF_RESULT
AND AL,0FH
CALL DISP_CHAR
```

```
MOV AL,LSB_OF_RESULT
AND AL,0F0H
MOV CL,04H
ROR AL,CL
CALL DISP_CHAR
```

```

        MOV AL,LSB_OF_RESULT
        AND AL,0FH
        CALL DISP_CHAR

        MOV DL,H_ATTACH
        MOV AH,02H
        INT 21H

        JMP LAST

DISP_CHAR PROC NEAR
        MOV BX,00H
        MOV BL,AL
        MOV DL,HEX_CHART[BX]
        MOV AH,02H
        INT 21H
        RET
DISP_CHAR ENDP

LAST:MOV AH,4CH
        INT 21H
CODE ENDS
END

```

OUTPUT:-RESULT IS :-1BC3H