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NAME :- DIVYA PRAVIN PATIL
CLASS :- SE COMPUTER
ROLL NO :- 45
BATCH :- B2
EXPERIMENT NO :- 5
TITLE:- PROGRAM USING FAR PROCEDURE.
AIM :- Write an 8086 Assembly Language Program for Addition of
two 8bit HEX numbers using FAR Procedure.

DATA SEGMENT
            NO1 DB 12H
            NO2 DB 35H
            HEX_CHART DB '0123456789ABCDEF'
            STORE_ADDITION 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
            ADD AL,NO2
            MOV AH,00H
            ADC AH,00H
            MOV STORE_ADDITION,AL

            MOV AL,AH
            CALL FAR PTR DISP_CHAR

            MOV AL,STORE_ADDITION
            AND AL,0F0H
MOV CL,04H
            ROR AL,CL
            CALL FAR PTR DISP_CHAR

            MOV AL,STORE_ADDITION
            AND AL,0FH
            CALL FAR PTR DISP_CHAR

            MOV DL,H_ATTACH
            MOV AH,02H
            INT 21H
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                MOV AH,4CH
                INT 21H
CODE ENDS

CODE_FAR SEGMENT
                ASSUME CS:CODE_FAR,DS:DATA

                DISP_CHAR PROC FAR

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

 DISP_CHAR ENDP

CODE_FAR ENDS
END


OUTPUT:- RESULT IS:-047H
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