

Name:-DIVYA PRAVIN PATIL
Class:-S.E Computer
Roll No:-45
Batch:-B2
Experiment No:-3
Title:- Program using Near Procedure.
Aim:-8086 Assembly language Program for Addition of two 8-bit HEX numbers using NEAR 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 DISP_CHAR

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

    MOV AL,STORE_ADDITION
    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 :-047H
```