**LAB 4:**

Task1:

Demonstrate the partial overlapping in segmented memory model and prove that two or more logical addresses generate the same physical address.

Task2:

1. Dry run and debug the following program to find the values in AL and BL at the end of the execution of program.
2. What is the new value of register IP, after executing a last instruction of following program?

**.MODEL SMALL**

**.STACK 100H**

**.DATA**

**A DW 0ABCDH**

**B DW 1234H**

**.CODE**

**MAIN PROC**

**MOV AX, @DATA**

**MOV DS, AX**

**MOV AX, -1**

**MOV BX, 255**

**ADD AX, BX**

**SUB BX, A**

**XCHG BX, A**

**XCHG AX, B**

**DEC AX**

**INC BX**

**MOV AH, 4CH**

**INT 21H**

**MAIN ENDP**

**END MAIN**

Task3:

Write an assembly program to sum of first ten elements of a Fibonacci series by using only **MOV and ADD** instruction.

Task4:

Write an assembly program to find the square of six by using only **MOV and ADD** instruction.