**Microprocessor and Interfacing (Assignment No. 1)**

**Question-1:**

**Execute the assembly program for the following two arrays, add first 4 numbers of array1 with array2 and subtract 5th to 8th elements and place all data in array3 Array1: 1 2 5 9 6 8 7 3 Array2: 2 3 9 2 5 7 9 1 Array3: 0 0 0 0 0 0 0 0 Solution**

**SOURCE CODE:**

org 100h

MOV BP, offset Arr1

MOV SI , offset Arr2

MOV DI, offset Arr3

MOV CX,4

L1:

MOV BL,[BP]

MOV AL,[SI]

ADD BL,AL

MOV [DI],BL

INC SI

INC DI

INC BP

loop L1

MOV CX,4

L2:

MOV BL,[BP]

MOV AL,[SI]

SUB BL,AL

MOV [DI],BL

INC SI

INC DI

INC B

loop L2

Arr1 DB 1,2,5,9,6,8,7,3

Arr2 DB 2,3,9,2,5,7,9,1

Arr3 DB 0,0,0,0,0,0,0,0

Ret

**OUTPUT:**









