**Practical - 18**

**Aim:** Write an assembly code to create a byte type data series and find the maximum, minimum, median and mean value of it. Save all answer in separate variable.

**Code:**

.MODEL SMALL

.DATA

SERIES DB 1H, 2H, 3H, 4H, 5H

LEN DB 6H

MAX DB 0H

MIN DB 0H

MEDIAN DB 0H

MEAN DB 0H

.CODE

MOV AX, @DATA

MOV DS, AX

XOR AX, AX

;MEDIAN

MOV SI, OFFSET SERIES

MOV AL, LEN

TEST AL, 01H

JNZ MED

MOV DL, 02H

DIV DL

ADD SI, AX

DEC SI

MOV AL, [SI]

INC SI

ADD AL, [SI]

DIV DL

MOV MEDIAN, AL

JMP X

MED:INC AL

MOV DL, 02H

DIV DL

ADD SI, AX

DEC SI

MOV BL, [SI]

MOV MEDIAN, BL

X:

MOV CX, 05H

MOV SI, OFFSET SERIES

MOV BL, [SI]

MOV MIN, BL

LABEL:

MOV BL, [SI]

ADD MEAN, BL

MOV AL, MAX

CMP MAX, BL

JAE MA

MOV MAX, BL

MA:MOV AL, MIN

CMP MIN, BL

JBE MI

MOV MIN, BL

MI:

INC SI

LOOP LABEL

XOR AX, AX

MOV AL, MEAN

MOV BL, 05H

DIV BL

MOV MEAN, AL

END

**Output:**

