Ahsanullah University of Science & Technology

Department of Computer Science & Engineering

Course No	: CSE2214
Course Title	: Assembly Language Programming Sessional
Assignment No	: 04

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Question No: 01

Question: Write a Program to input an uppercase letter and display its corresponding lowercase letter.

Answer:

- MODEL SMALL

- STACK 100H

- DATA
MSG1 DB 'INPUT THE UPPERCASE LETTER:$'
MSG2 DB 'THE LOWERCASE LETTER IS:$'

RESULT DB?

- CODE

```
    MAIN PROC

    MOV AX, @DATA
    MOV DS, AX

    LEA DX, MSG1
    MOV AH, 9
    INT 21H
```

```asm
MOV  AH, 1
INT  21H
ADD  AL, 20H
MOV  RESULT, AL

MOV  AH, 2
MOV  DL, 0DH
INT  21H
MOV  DL, 0AH
INT  21H

LEA DX, MSG 2
MOV  AH, 9
INT  21H

MOV  DL, RESULT
MOV  AH, 2
INT  21H

MOV  AH, 4CH
INT  21H
END MAIN
```

Question No! 02

Question: Write a Program to read two decimal digits whose sum is less than 10 and display them and their sum in the next line with an appropriate message.

Answer:

· MODEL SMALL

· STACK 100H

· DATA
MSG1 DB 'INPUT A NUMBER: $'

MSG2 DB 'INPUT ANOTHER NUMBER: $'

MSG3 DB ' THE SUM IS: $'

· CODE
   MAIN PROC

   MOV AX, @DATA
   MOV DS, AX

   LEA DX, MSG1
   MOV AH, 9
   INT 21H

```asm
MOV AH, 1
INT 21H
MOV BL, AL
SUB BL, 30H

MOV AH, 2
MOV DL, 0DH
INT 21H
MOV DL, 0AH
INT 21H

LEA DX, MSG2
MOV AH, 9
INT 21H
MOV AH, 1
INT 21H
MOV CL, AL
SUB CL, 30H
ADD BL, CL

MOV AH, 2
MOV DL, 0DH
INT 21H
MOV DL, 0AH
INT 21H
```

```asm
LEAD DX, MSG3
MOV AH, 9
INT 21H

    ADD  BL, 30H
    MOV  DL, BL
    MOV  AH, 2
    INT  21H

    MOV AH, 4CH
    INT 21H
    END MAIN
```