AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

Department of Computer Science and Engineering
Program: BSc in Computer Science and Engineering

Course Code: CSE 2214

Assignment No: 01

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1. Write a program to input an uppercase letter and display its corresponding lowercase letter.

Answer:

```
.model small
.stack 100h
.data
input db 'Enter an uppercase letter : $'
output db 'Corresponding lowercase  letter : $'
char db ?
.code
main proc
   mov ax,@data
   mov ds,ax

   lea dx,input
   mov ah,9
   int 21h

   mov ah,1
   int 21h
   mov char,al

   mov ah,2
   mov dl,13
   int 21h
   mov dl,10
   int 21h

   lea dx,output
   mov ah,9
   int 21h

   add char,32
   mov ah,2
   mov dl,char
   int 21h

mov ah,4ch
main endp
end main
```

2. 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 appropriate message.

Answer:

```
.model small
.stack 100h
.data
digit1 db 'Enter Digit 1 :$'
digit2 db 'Enter Digit 2 :$'
sum db 'Sum of the Digits :$'
d1 db ?
d2 db ?

.code

main proc
  mov ax,@data
  mov ds,ax

  lea dx,digit1
  mov ah,9
  int 21h

  mov ah,1
  int 21h
  mov d1,al

  mov ah,2
  mov dl,13
  int 21h
  mov dl,10
  int 21h

  lea dx,digit2
  mov ah,9
  int 21h

  mov ah,1
  int 21h
  mov d2,al

  sub d1,48
  sub d2,48
```

```
        mov bl,d1
        add bl,d2
        add bl,48

        mov ah,2
        mov dl,13
        int 21h
        mov dl,10
        int 21h

        lea dx,sum
        mov ah,9
        int 21h


        mov dl,bl
        mov ah,2
        int 21h

mov ah,4ch
main endp
end main
```