**LAB TASK – 8**

1. Write a program in assembly language to display a two-digit number on the screen. The

Two-digit number is required to be taken in the program itself.

ORG 100h

MOV AH, 09h

MOV DX, OFFSET output

INT 21h

MOV DL, '5'

MOV AH, 02h

INT 21h

MOV DL, '9'

MOV AH, 02h

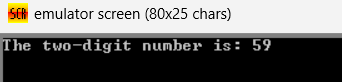
INT 21h

MOV AH, 4Ch

INT 21h

output DB 'The two-digit number is: $'

OUTPUT:



2. Write an assembly language program to take two single-digit integers from the user and

print the result of addition on the screen.

ORG 100h

MOV DX, OFFSET msg\_input1

MOV AH, 09h

INT 21h

; Read the first digit from the user

MOV AH, 01h

INT 21h

SUB AL, '0' ; Convert ASCII to integer

MOV BL, AL ; Store the first digit in BL

; Display the message "Enter the second digit: "

MOV DX, OFFSET msg\_input2

MOV AH, 09h

INT 21h

; Read the second digit from the user

MOV AH, 01h

INT 21h

SUB AL, '0' ; Convert ASCII to integer

MOV CL, AL ; Store the second digit in CL

; Perform addition

ADD BL, CL ; Add the two digits, result in BL

; Convert the result back to ASCII

ADD BL, '0' ; Convert the sum to ASCII

; Display the message "The result of addition is: "

MOV DX, OFFSET msg\_output

MOV AH, 09h

INT 21h

; Print the result

MOV DL, BL

MOV AH, 02h

INT 21h

MOV DL, 0Dh

MOV AH, 02h

INT 21h

MOV DL, 0Ah

INT 21h

; Terminate the program

MOV AH, 4Ch

INT 21h

; Data section with messages

msg\_input1 DB 'Enter the first digit: $'

msg\_input2 DB 0Dh, 0Ah, 'Enter the second digit: $'

msg\_output DB 0Dh, 0Ah, 'The result of addition is: $'

END

OUTPUT:

