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Lab: 2

Question: 1

.MODEL SMALL

.STACK 100H

.DATA

a DB "This is my first message using assembly!$"

.CODE

MAIN PROC

MOV AX,@DATA

MOV DS,AX

; DISPLAYING '&'

MOV AH,1

INT 21H

MOV DL,AL

MOV AH,2

INT 21H

;---------------

;DISPLAYING STRING

LEA DX, a

MOV AH,9

INT 21H

MOV AX,4C00H

INT 21H

MAIN ENDP

END MAIN

Question: 2

.MODEL SMALL

.STACK 100H

.DATA

b DB "ENTER NUM1: $"

c DB "ENTER NUM2: $"

d DB "THE RESULT IS: $"

.CODE

MAIN PROC

MOV AX,@DATA

MOV DS,AX

; FIrst input

LEA DX, b

MOV AH,9

INT 21H

MOV AH,1

INT 21H

SUB AL, 30H

MOV BL, AL

;2nd Input

MOV AH, 2

MOV DL, 0DH

INT 21h

MOV DL, 0AH

INT 21H

LEA DX, c

MOV AH,9

INT 21H

MOV AH,1

INT 21H

SUB AL, 30H

MOV BH, AL

;Output

MOV AH, 2

MOV DL, 0DH

INT 21h

MOV DL, 0AH

INT 21H

LEA DX, d

MOV AH,9

INT 21H

ADD BL, BH

ADD BL, 30H

MOV DL, BL

MOV AH, 2

INT 21H

MOV AX,4C00H

INT 21H

MAIN ENDP

END MAIN

Question: 3

.MODEL SMALL

.STACK 100H

.DATA

b DB "ENTER A HEX DIGIT: $"

c DB "IN DECIMAL IT IS : 1$"

.CODE

MAIN PROC

MOV AX,@DATA

MOV DS,AX

LEA DX, b

MOV AH,9

INT 21H

MOV AH, 1

INT 21H

SUB AL, 11H

MOV BL, AL

; Next Line String

MOV AH, 2

MOV DL, 0DH

INT 21h

MOV DL, 0AH

INT 21H

LEA DX, c

MOV AH,9

INT 21H

;--------

MOV DL, BL

MOV AH, 2

INT 21H

MOV AX,4C00H

INT 21H

MAIN ENDP

END MAIN

Question: 4

.MODEL SMALL

.STACK 100H

.DATA

b DB "ENTER NUM1: $"

c DB "ENTER NUM2: $"

d DB "The sum of $"

e DB " and $"

f DB " is $"

g DB "First Number: $"

h DB "Second Number: $"

.CODE

MAIN PROC

MOV AX,@DATA

MOV DS,AX

;Displaying "?"

MOV AH,1

INT 21H

MOV BL,AL

MOV AH, 2

MOV DL, 0DH

INT 21h

MOV DL, 0AH

INT 21H

MOV DL, BL

INT 21H

MOV AH, 2

MOV DL, 0DH

INT 21h

MOV DL, 0AH

INT 21H

; FIrst input

LEA DX, b

MOV AH,9

INT 21H

MOV AH,1

INT 21H

MOV BL, AL

;2nd Input

MOV AH, 2

MOV DL, 0DH

INT 21h

MOV DL, 0AH

INT 21H

LEA DX, c

MOV AH,9

INT 21H

MOV AH,1

INT 21H

MOV BH, AL

;Output

;---------

MOV AH, 2

MOV DL, 0DH

INT 21h

MOV DL, 0AH

INT 21H

LEA DX, g ; first number

MOV AH,9

INT 21H

MOV DL, BL

MOV AH, 2

INT 21H

MOV AH, 2

MOV DL, 0DH

INT 21h

MOV DL, 0AH

INT 21H

LEA DX, h ;second number

MOV AH,9

INT 21H

MOV DL, BH

MOV AH, 2

INT 21H

;---------

MOV AH, 2

MOV DL, 0DH

INT 21h

MOV DL, 0AH

INT 21H

LEA DX, d ;The sum of

MOV AH,9

INT 21H

MOV DL, Bl

MOV AH, 2

INT 21H

LEA DX, e ;and

MOV AH,9

INT 21H

MOV DL, BH

MOV AH, 2

INT 21H

LEA DX, f ;is

MOV AH,9

INT 21H

ADD BL, BH

SUB BL, 30H

MOV DL, BL

MOV AH, 2

INT 21H

MOV AX,4C00H

INT 21H

MAIN ENDP

END MAIN