Midterm**(Part-2)*(CSE331L.7 – Asif Ahmed Neloy\_Summer’20)***

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*Time 30 minutes, Marks 35****(You need to answer all questions).***

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1. Write a program in assembly language that can read 2 integers and print the Multiplication of two integers. **[10]**

**Example:**

Enter Integer 1: 10

Enter Integer 2: 05

MUL of the Integers: 50

ANS: DATA SEGMENT

NUM1 DB ?

NUM2 DB ?

RESULT DB ?

MSG1 DB 10,13,"ENTER FIRST NUMBER TO MULTIPLY : $"

MSG2 DB 10,13,"ENTER SECOND NUMBER TO MULTIPLY : $"

MSG3 DB 10,13,"RESULT OF MULTIPLICATION IS : $"

ENDS

CODE SEGMENT

ASSUME DS:DATA CS:CODE

START:

MOV AX,DATA

MOV DS,AX

LEA DX,MSG1

MOV AH,9

INT 21H

MOV AH,1

INT 21H

SUB AL,30H

MOV NUM1,AL

LEA DX,MSG2

MOV AH,9

INT 21H

MOV AH,1

INT 21H

SUB AL,30H

MOV NUM2,AL

MUL NUM1

MOV RESULT,AL

AAM

ADD AH,30H

ADD AL,30H

MOV BX,AX

LEA DX,MSG3

MOV AH,9

INT 21H

MOV AH,2

MOV DL,BH

INT 21H

MOV AH,2

MOV DL,BL

INT 21H

MOV AH,4CH

INT 21H

ENDS

END START

1. Write a program in assembly language that can Read string with gaps andPrint string using MOV instruction.**[10]**

**Example:**

Enter a String: Boring Lab

The integer is: Boring Lab

Ans: .MODEL SMALL

.STACK 100H

.DATA

;The string to be printed

STRING DB 'This is a sample string', '$'

.CODE

MAIN PROC FAR

MOV AX,@DATA

MOV DS,AX

; load address of the string

LEA DX,STRING

;output the string

;loaded in dx

MOV AH,09H

INT 21H

;interrupt to exit

MOV AH,4CH

INT 21H

MAIN ENDP

END MAIN

1. Write a program in Assembly language that Prints Digit from 0 – 9 and also their sum.**[15]**

**Example:**

Digits: 0

1

2

3

4

5

6

7

8

9

Sum: 45

DATA SEGMENT

DATA ENDS

CODE SEGMENT

ASSUME DS:DATA,CS:CODE

START :

MOV AX,DATA

MOV DS,AX

MOV BL,00H

MOV CH,00H

MOV CL,0AH

L1 : MOV DH,00H

MOV DL,BL

ADD DL,'0'

MOV AH,02H

INT 21H

INC BL

LOOP L1

MOV AH,4CH

INT 21H

CODE ENDS

END START