

New Era University

College of Computer Studies





Direction: Using your computer, construct an assembly language program that will show the output given below. After you successfully run your program, write the codes on the space provided.

OUTPUT 1:
English Alphabets
A
В
С
-
-
-
X
Υ
Z

Program Ends Here!

OUTPUT 2:

99999999 8888888 777777

-

-

333

22

1

```
CODE (lab6_1.asm)
TITLE LAB6_1.ASM
DOSSEG
.MODEL SMALL
.STACK 0100h
.DATA
    A db "English Alphabets$"
    C db "Program Ends Here!$"
.CODE
    MOV AX, @DATA
   MOV DS, AX
    MOV AH, 09h
     MOV DX, OFFSET A
     INT 21h
    MOV DL, OAh ;enter next line
    INT 21h
    MOV CX, 001Ah ;01A means 26 in hexadecimal
   MOV AH, 02h
   MOV DL, 'A'
B: INT 21h
   MOV BL, DL
    MOV DL, OAh ; next line
    INT 21h
    MOV DL, ODh ; carriage return character
    INT 21h
    MOV DL, BL ; transfer back the value of DL
    INC DL
    LOOP B
    MOV AH, 09h
     MOV DX, OFFSET C
     INT 21h
    MOV AX, 4C00h
    INT 21h
END
```

CSL312-18 COMPUTER ARCHITECTURE & ORGANIZATION MARASIGAN, VEM AIENSI A. Laboratory Activity 006 November 11, 2023 3BSCS-1 OUTPUT (lab5_1.asm) C:\>TASM lab6_1 Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International Assembling file: lab6_1.ASM Error messages: None Warning messages: None Passes: Remaining memory: 491k C:\>TLINK lab6_1 Turbo Link Version 4.0 Copyright (c) 1991 Borland International C:\>lab6_1_ BB DOSBox 0.74-3, Cpu speed: 3000 cycle D E F G Н Ι JKLMNOPQRSTUVWXYZ

Program Ends Here!

```
3BSCS-1
                           CODE (lab6_2.asm)
 TITLE LAB6_1.ASM
 DOSSEG
 .MODEL SMALL
 .STACK 0100h
 .DATA
 .CODE
     MOV AX, @DATA
     MOV DS, AX
     MOV CX, 0009h
     MOV DL, '9'
     Α:
         PUSH CX
         MOV AH, 02h
         B: INT 21h
         LOOP B
         MOV BL, DL
         MOV DL, OAh
                     ;next line
         INT 21h
         MOV DL, ODh ; carriage return character
         INT 21h
         MOV DL, BL
                      ;transfer back the value of DL
         DEC DL
         DEC CX
         POP CX
     LOOP A
     MOV AX, 4C00h
     INT 21h
 END
```

OUTPUT (lab5_2.asm) DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX Х C:\>TASM lab6_2 Turbo Assembler Version 2.51 Copyright (c) 1988, 1991 Borland International Assembling file: lab6_2.ASM Error messages: None Warning messages: None Passes: 1 Remaining memory: 491k C:\>TLINK lab6_2 Turbo Link Version 4.0 Copyright (c) 1991 Borland International C:\>lab6_2 999999999 88888888 7777777 666666 55555 4444 333 22 1