National University of Computer and Emerging Sciences



Laboratory Manual

for

Computer Organization and Assembly Language Lab

(EL 229)

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Question 1

Write an assembly subroutine the will copy the first half of display memory to second half. For example. Your output after executing the code should be following.

Before executing:

```
Welcome to DOSBox vo.74

For a short introduction for new users type: INTRO
For supported shell commands type: HELP

To adjust the emulated CPU speed, use ctrl-Fi1 and ctrl-Fi2.
To activate the keymapper ctrl-Fi.
For more information read the README file in the DOSBox directory.

HAUE FUN!
The DOSBox Team http://www.dosbox.com

Z:\>SET BLASTER=A220 17 D1 H5 T6

Z:\>mount c "F:\STUDY MATERIAL\FAST Lectures\Fall 2019\COAL\nasm'
Drive C is mounted as local directory F:\STUDY MATERIAL\FAST Lectures\Fall 2019\COAL\nasm\
Z:\>c:
C:\>nasm temp.asm -o temp.com -1 temp.lst

C:\>_
```

After Executing

```
DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: DOSBOX

Welcome to DOSBox v0.74

For a short introduction for new users type: INTRO
For supported shell commands type: HELP

To adjust the emulated CPU speed, use ctrl-F11 and ctrl-F12.
To activate the keymapper ctrl-F1.
For more information read the README file in the DOSBox directory.

HAVE FUN!
The DOSBox Team http://www.dosbox.com

Welcome to DOSBox v0.74

For a short introduction for new users type: INTRO
For supported shell commands type: HELP

To adjust the emulated CPU speed, use ctrl-F11 and ctrl-F12.
To activate the keymapper ctrl-F1.
For more information read the README file in the DOSBox directory.

HAVE FUN!
The DOSBox Team http://www.dosbox.com

C:>>
```

Question 2

Write a subroutine that take string and its length as input and print the string without spaces. Note that the original string should not be changed anywhere in your code.

Example:

If string is "I am From Pakistan", it should be displayed on screen as "IamFromPakistan".