

National University of Computer and Emerging Sciences

Lab Manual

Computer Organization and Assembly Language



Lab 07

Instructor

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Class

CS3

Semester

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Fast School of Computing

FAST-NU, Lahore, Pakistan

Objectives

- Display Memory Formation
- Hello World in Assembly Language
- Screen Location Calculation

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Note for all questions: You can make as many memory variables, subroutines as you need. Must read all the manual before starting.

ACTIVITY 1:

Write a program to print three different messages on the three different locations on the screen.

Play with changing background color, foreground color and blinking foreground.

ACTIVITY 2:

Write a function **drawrect** that takes four parameters via the stack. The parameters are top, left, bottom, and right in this order. The function should display a rectangle on the screen using the characters + - and |.

ACTIVITY 3:

Practice the activities from Lab 1 through Lab 6, to prepare yourself well for a Comprehensive Midterm of COAL Lab happening at 10th week (from 24th to 28th October).

REFERENCES

- <http://www.dosbox.com/download.php?main=1>
- <http://sourceforge.net/projects/nasm>
- <http://www.nasm.us/>
- <http://www.programmersheaven.com/download/21643/download.aspx> (AFD)