National University of Computer and Emerging Sciences



Laboratory Manual

for

Computer Organization and Assembly Language Programming

(EL 213)

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| Course Instructor | Mr. Salman Mubarik |
| Lab Instructor(s) | Ms. Hamna Waseem  Mr. Umar Bashir |
| Section | F |
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Department of Computer Science

FAST-NU, Lahore, Pakistan

## Objectives

In this lab, students shall be able to:

* Learn about using Extra Segment.
* Understand the concept of Video Memory.
* Output on screen with different attribute settings.

**Exercise 1:** Write a function that takes a decimal number and prints its hexadecimal at (x,y) coordinates passed by caller. (Modify the codes given in examples of chapter 6)

**Exercise 2:** Write an assembly subroutine that will receive an array’s address, its size and a key to search. If the key is found in the array, print ‘found’ on Screen in blinking green font. Else print ‘failed’ on screen in red font (no blinking).

**Exercise 3:** Write a program that finds total number of occurrences of a character from a null terminated string. For example total occurrences of ‘a’ in string “I am a student of coal” are 3. Print the number of occurrences on screen.