

**National University of Computer and Emerging Sciences, Lahore Campus**



Course:	COAL Lab	Code:	EL213
Program:	BS (Computer Science)	Semester:	
Duration:	120 minutes	T. Marks:	25
Date:	17-11-21	Weight	25
Section:	3F	Page(s):	1
Exam:	Lab midterm		

**Instructions/Notes:**

- Use of the internet, notes, codes, lab manuals, and flash drives is strictly prohibited.
- You are only allowed to use the soft copy of book.
- Submit both questions on Google Classroom as well.
- Your code should be **intended** and commented properly. Use meaningful label names.
- It is your responsibility to save your code from being copied. All matching codes will be considered cheating cases. PLAGIARISM will result in forwarding of case to Disciplinary Committee and negative marks in Lab Final.

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**Question # 1: 10 marks**

Write a program to find the maximum number and the minimum number from an array of ten numbers. The maximum and minimum number in any two registers.

Sample Array: 7,4,8,2,7,7,9,5,6,1

**Question # 2: 15 marks**

Write a subroutine which takes two parameters 1) array 2) size of array. Each element of the array is a positive integer of maximum size 1 byte. The subroutine removes duplicate integers from the array, and returns the new array size on stack. You cannot use any temporary memory. All changes should be made to the same array passed as parameter. End of the array will be marked by -1. You can put any number of -1 as you want.

**Example:**

MyArray: db 1, 2, 1, 3, 4, 7, 9, 3, 2, 5 (size of array is 10)

After applying the subroutine, the array will become:

MyArray: db 1, 2, 3, 4, 7, 9, 5, -1, -1, -1 (new size is 7)

**Best of Luck!**