



# FAST

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**National University of Computer and Emerging Sciences**

DEPARTMENT OF COMPUTER SCIENCE

# Object Oriented Programming

## Lab-04



# HOME WORK/TASKS (LAB-04)

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**(Instructor)**

# Lab 04 Content

- ☐ **Arrays (1-D, 2-D)**
- ☐ **References**
- ☐ **Pointers**
- ☐ **Function(call by value, call by reference)**
- ☐ **C++ Strings**

# Student Alerts

- ❑ **No late submissions will be entertained.**
- ❑ **All submissions should be made on Google Class Room.**
- ❑ **Emailed assignment will be marked as 0.**
- ❑ **An individual/group may be assigned a **straight-forward 0** if the submitted assessed Home work/Task is copied/cheated from another individual/group.**
- ❑ **After due date, there will be an **Oral Viva**.**
- ❑ **Please upload a **PDF/MS word** file including all tasks code and output respectively.**

# Lab 04 Home Work/Task(Arrays)

**Performs all question through function**

1. Write a program in C ++ to copy the elements of one array into another array?
2. Write a program in C ++ to count a total number of duplicate elements in an array?
3. Write a program in C ++ to print all unique elements in an array
4. Write a program in C ++ to merge two arrays of same size sorted in descending order.

# Lab 04 Home Work/Task(Arrays)

Performs all question through function

5. Write a program in C ++ to count the frequency of each element of an array.
6. Write a program in C ++ to find the maximum and minimum element in an array.
7. Write a program in C ++ to separate odd and even integers in separate arrays
8. Write a program in C ++ to sort elements of array in ascending order.
9. Write a program in C ++ to delete an element at desired position from an array?
10. Write a program in C ++ to find the second smallest element in an array.?
11. Write a program in C ++ for addition of two Matrices of same size?
12. Write a program in C ++ for multiplication of two square Matrices?
13. Write a program in C ++ to find the pivot element of a sorted and rotated array using binary search?

# Lab 04 Home Work/Task (Pointers)

**Performs all question through function**

14. Write a program in C ++ to add two numbers using pointers
15. Write a program in C ++ to add numbers using call by reference
16. Write a program in C ++ to find the maximum number between two numbers using a pointer.
17. Write a program in C ++ to find the factorial of a given number using pointers
18. Write a program in C ++ to count the number of vowels and consonants in a string using a pointer
19. Write a program in C ++ to sort an array using Pointer.
20. Write a program in C ++ to show how a function returning pointer
21. Write a program in C ++ to print a string in reverse using a pointer

# Lab 04 Home Work/Task (String)

**Performs all question through function**

- 23. Write a program in C ++ to find the length of a string without using library function?
- 24. Write a program in C ++ to count total number of alphabets, digits and special characters in a string?
- 25. Write a program in C ++ to count total number of vowel or consonant in a string?
- 26. Write a program in C ++ to check whether a letter is uppercase or not?



THANKS ☺

