National University of Computer and Emerging Sciences

Lab Manual

for

Programming Fundamentals

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Objectives

In this lab we will mainly perform activity

- Passing array into functions
- Binary search
- Linear search
- Insertion sort
- Bubble sort
- Selection sort
- File handling

Problem 1:

Write a function that receive float array, its size and character + or - . The function should return the sum of positive number stored in the array for the character '+' , it returns the sum of negative number for the character '-' .

Problem 2:

Write a program that takes 20 numbers from the user store it in array, to sort these number first you ask the user which sorting algorithm you used.
1. Insertion sort
2. Bubble sort
3. Selection sort

If user enter 1 your program sort these numbers by insertion sort and so on.
Then you ask user which number you want to search. And also ask him which searching algorithm you used.
1. Binary search
2. Linear search

If the user enters 1 then your program searches that number using binary search and so on.
Note: For each sorting and searching algorithm you make functions for that.

Problem 3:
Write a program that read numbers from a file and write even, odd and prime number to separate file.