National University
of computer and emerging sciences

CL-1004
Object Oriented Programming- Lab
Spring' 2023
BS-SE

Lab Manual 02

Problem 1:

Write a func (int * num1, int *num2) that exchanges the values of the passed numbers.

Problem 2:

Write a func (int *arr, int size) that takes input values from the user, places those values in the array using pointer notation. Sort the array in descending order, then print the array in reverse order using pointer notation and print addresses as well. Also, calculate and return sum of the even indices of the array using pointer notation.

Problem 3:

Write a func (int *arr, int size, int num) that receives a pointer, dynamically allocate array (arr) using the provided size. Initialize array with user input using pointer notation. Iterate through the array to find if sum of two numbers is equal to the number given as input. Return the sum if it is equal to number else return negative value.

Problem 4:

Write a func (int * arr, int size, int num1, int num2) that takes input from the user. Sorts the array in ascending order and inserts the given number (num1) in place of num2 in the array, in such a way that the array remains sorted. Return the array.

Problem 5:

Write a func (char * c1, char * c2) that finds the provided char array (c2) in the char array (c1) and remove that from the char array (c1). Return the array.

Problem 6:

Write a func (int * arr, int size) that initializes array using user input for provided size. Find the first and the second smallest number in the array and move the number to the end of the array in sorted order (ascending). Return the array.

Problem 7:

Write a func (char * c1, char * c2) that takes two char arrays to see if they have same letters or not, return true if equal, else return false. Comparison of arrays is done using pointers.

Example:

c1[12] = “a gentleman”, c2[12] = “elegant man”

Result: true

Problem 8:

Write a func (char * c1) that finds if the char at the first index matches the character at the last index, the char at the second index matches the char at the second last index, and so on. Print the results and return true is every element matches, else return false.

Example:

c1 [7] = “racecar”

Results: true

c2 [8] = “rotater”

Results: false