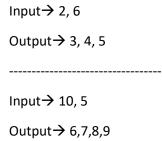
C - Programming

LAB 3

1- Write a C function that take two numbers and return an array containing all numbers between the two given numbers.

Examples:



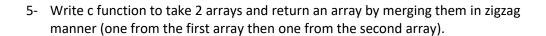
- 2- Write c function to find the most repeated number from $(0 \rightarrow 9)$ in an array of char (assume size of the array is large) try to optimize your code.
- 3- Write c function to search for a number in array of integers.
- 4- Write c function to sort an array of integers.

Assignment 3

- 1- Write a program in main to get 10 integers as an input from the user, store them in an array then call 3 different functions that returns the sum, maximum element and minimum element of the array.
- 2- Write a program to take two 2D (3*3) array from the user then do matrix multiplication on them.
- 3- Write a C function to take the first name from the user as string, then take the second name as a string then concatenate (merge) both in one array and return it.
- 4- Write c function to copy string to string without copy repeated characters then return string.

Examples:

| Input→ "Sayed Sukkar" |
|-----------------------|
| Output→ "Sayed ukr" |
| |



Example:

6- Write a C function that return the count of the longest consecutive occurrence of a given number by the user in an array.

Example:

Input
$$\rightarrow$$
 {1,2,2,3,3,3,4,4,4,4,3,3,3} // search for number 3

Output \rightarrow result = 4.

7- Write a C function that count the longest consecutive occurrence of any number, and return the number that is most repeated and the count of how many times it was repeated.

/* this function need to return the count and the number to the main ... do not print them in function */

Example:

- 8- Implement bubble & selection sort.
- 9- Implement linear & binary search.