Introduction to Computing Laboratory
Assignment No. – 9

1. Write a function which receives a float and an integer from main(), finds the product of these two and returns the product which is printed through main().
2. Write a function in C that will swap the contents of two variables. Call the function from main and print the values of these variables from main.
3. Write a recursive function in C to print the first n terms of the Fibonacci sequence.
4. Write a recursive function in C to find the factorial of a given number.
5. Write a recursive function in C to find the GCD of two input numbers.
6. Write a program in C to populate an array with some integers and accept a key value from *main()*. Now, write two functions namely, *void ububble(int *, int)* (first argument is the base address of the array and second argument is the number of elements present in the array) and *int rbserch(int *, int, int, int)* (first argument is the base address of the array, second and third arguments are the lower and upper bounds of the array / sub-array respectively, fourth argument is the key element), to sort the array first (using *void ububble(int *, int)*) and then apply recursive binary search on the sorted array (using *int rbserch(int *, int, int, int))* to check whether the key element is present in the array or not. If it is in the array, print the index (that *int rbserch(int *, int, int, int)* will return) of the element in the array. Otherwise print the failure message.