Introduction to Computer Science Lab II

CIEE102, Spring 2020

Lab 1

1. Follow instructions below to write a program.
    a. Define the variable lptr to be a pointer to an object of type long
    b. Define two long integer value1 and value2 where value1 is initialized to 200000.
    c. Assign the address of variable value1 to pointer variable lptr.
    d. Print the value of object pointed to by lptr.
    e. Assign the value of the object pointed to by lptr to variable value2.
    f. Print the value of value2.
    g. Print the address of value1.
    h. Print the address stored in lptr.
2. For each of the following, write a C statement that performs the indicated task. Assume that floating-point variables number1 and number2 are defined and that number1 is initiated to 7.3.
    a. Define the variable fptr to be a pointer to an object of type float.
    b. Assign the address of variable number1 to pointer variable fptr.
    c. Print the value of the object pointed to by fptr
    d. Assign the value of the object pointed to by fptr to variable number2
    e. Print the value of number2
    f. Print the address of number1
    g. Print the address stored in fptr
3. Write a function which accepts two integer pointers as parameters and add those two integers pointed to by these two pointers. Also write a main program to test your function.
4. Write a function which accepts two integer pointers as parameters and swap those two integers pointed to by these two pointers. Also write a main program to test your function.
5. Write a function which accepts one integer pointer as parameter and calculate the factorial of the integer pointed to by this pointer. Also write a main program to test your function.