



## C++ Programming – ENG TECH 1CP3 Pointers

## Lab L4

For each of the following problems, be sure to output the results to the console.

1. Write a void function named read2Values that will prompt the user to enter two double values greater than 0. If either value is less or equal to 0 the function must repeat the request for the two values. Once the two values are entered the function must return both values to the calling function (main) using pointer variables and then the two values must be printed in main to the console. The function prototype is shown below:

```
void read2Values(double *v1, double *v2);
```

2. Write a boolean function called calculateBox will return both the volume and surface area of a box with dimensions of length, width and height in units of cm. The function must accept the three input dimension for the box and return both the volume and surface area using pointer variables. If any of the dimensions is less or equal to 0 the function should return false through the use of the return statement. If the values are greater than 0 the function must return true.

Write a main function that will prompt the user to enter the dimensions of the box and then call the function. If the function returns true than print both the Volume and Surface area of the box. If the function returns false, print an error message to the screen. The function prototype is given below:

Note: - Indicate the units for all I/O values required from- or provided to- the user.

Create a Word .doc file that contains the source code and a screen captures of the console window as the program is running, for both C++ programs. Save this file as YourName\_Lab\_6.doc and upload and submit to the appropriate AVENUE lab drop-box.