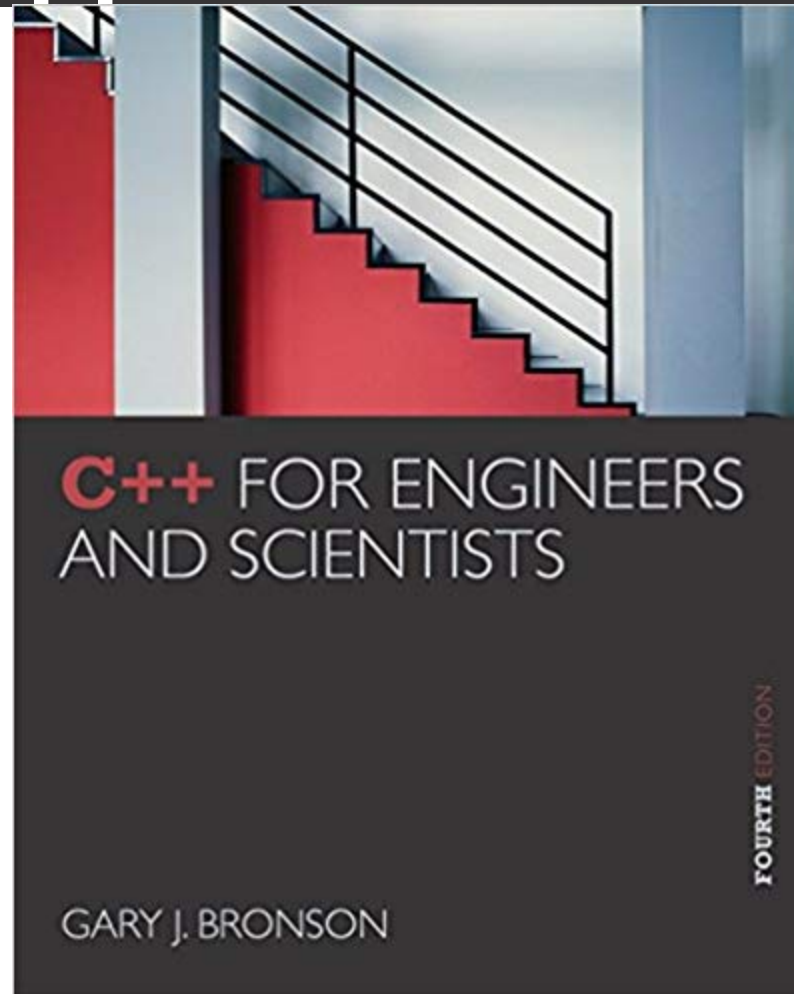


ELEG 1043

Computer Applications in Engineering



Homework Assignment 3

- **EXERCISES 6.2** in the textbook

3. (Practice) Write function headers for the following:

- a. A function named `check()` that has three parameters. The first parameter should accept an integer number, and the second and third parameters should accept a double-precision number. The function returns no value.
- b. A function named `findAbs()` that accepts a double-precision number passed to it and returns its absolute value.
- c. A function named `mult()` that accepts two floating-point numbers as parameters, multiplies these two numbers, and returns the result.
- d. A function named `sqrIt()` that computes and returns the square of the integer value passed to it.
- e. A function named `powfun()` that raises an integer number passed to it (as an argument) to a positive integer power and returns the result as an integer.
- f. A function that produces a table of the numbers from 1 to 10, their squares, and their cubes. No arguments are to be passed to the function, and the function returns no value.

Homework Assignment 3

- **EXERCISES 6.2** in the textbook

6. (General math) a. The side surface area, S , of a cylinder is given by this formula:

$$S = 2\pi r l$$

r is the cylinder's radius, and l is its length. Using this formula, write a C++ function named `surfarea()` that accepts a cylinder's radius and length and returns its side surface area.

b. Include the function written in Exercise 6a in a working program. Make sure your function is called from `main()` and returns a value to `main()` correctly. Have `main()` use a `cout` statement to display the returned value. Test the function by passing various data to it.

Due: 03/26/2019