Proj 5 - Functions

Grades for this assignment come from the quiz: false  
[**Click here to go to the quiz**](https://slcc.instructure.com/courses/202748/quizzes/%7B%7B%20quiz_id%20%7D%7D)

This assignment is linked to the discussion, false. Grading will be based on posts in the topic.  
[**Click here to go to the discussion**](https://slcc.instructure.com/courses/202748/discussion_topics/%7B%7B%20discussion_topic_id%20%7D%7D)

Problem

Create a program that runs from a menu and solves various engineering and mathematical problems.

Specifications

1. Define the following functions described in Exercises 6.1 in the Bronson text (NOTE: UML syntax):
   * findAbs(double:num):double (Exercises 6.1.3)
   * annulusMoment(rad:double, iRad:double):double (Exercises 6.1.5)
   * buoyantForce(ro:double, vol:double, units:int):double (Exercises 6.1.7)
   * template<class T>maximum(a:T, b:T, c:T):T (returns the maximum of three values)
   * template<class T>square(n:T):T (returns the square of a number)
2. Create a program that runs from a menu with the following options:
   * Absolute Value
   * Annulus Moment
   * Buoyant Force
   * Maximum
   * Square
   * Exit
3. Create the following "menu" functions that are called from the corresponding menu option:
   * getAbsoluteValue()
   * getAnnulusMoment()
   * getBuoyantForce()
   * getMaximum()
   * getSquare()

**The get functions will take user input, then call the function and pass the user input through it.**

**Get functions will be void, and require no parameters**

**Ex:**

**Case ‘1’:**

**getAbsoluteValue();**

**Break;**

1. Each of these menu functions should:
   * get input from the user
   * pass the input to the appropriate function to perform the calculation
   * display the result

Admin

1. Grading
   * 0 points if your program does not compile.
   * +5 for comments, indentation and placement of {} per [Style Guide](http://www.cs.slcc.edu/style-guide.shtml).
   * +5 for each specification met.
2. Submission: Attach your .cpp file(s) and submit.