

IST 209 Assignment #3

4 December 2007

Methods of Power

You must upload the Java source file through the class' web server at siu.globaleyes.com prior to midnight on 4 Dec.

In this assignment you will write a Java application which will calculate the value of a real number raised to the power of a whole number. In this program you must write 3 methods:

1. A method which will test to see if a String contains a valid real number
2. A method which will test to see if a String contains a valid integer
3. A method which will return the value of a real number raised to the power of an integer

Use the first method to validate whether the user types in a valid decimal value for the base and ask the user to continue typing in a value until they have typed in an acceptable decimal number. Use the 2nd method to validate whether the user types in a valid whole number value for the power and ask the user to continue typing in a value until they have typed in an acceptable integer value. Use the 3rd method to perform the actual calculation of the 1st number raised to the power of the 2nd number and then print the result.

Note: Your assignment will be graded along 3 primary facets.

Category	Criterion	Value
1. Correctness	does it compile and produce the correct results	75 points
2. Style	comments, use of whitespace, variable and method names	15 points
3. Robustness	Is the code reusable? Does the code use the language constructs effectively? Is the code efficient?	10 points