

Quarter 2 Programming Test Practice: The Calculator Project

Write a Java class that will accept *two integers (A and B) as input*, and then perform the following operations:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | 1. Add A and B |
| <input type="checkbox"/> | 2. Subtract B from B |
| <input type="checkbox"/> | 3. Multiply A and B |
| <input type="checkbox"/> | 4. Divide A and B |
| <input type="checkbox"/> | 5. Calculate A modulo B |
| <input type="checkbox"/> | 6. Check if B is a divisor of A |
| <input type="checkbox"/> | 7. Calculate $\log_b(A)$ –you may use <i>Math.log(x)</i> to help you calculate this ($\log A/\log B$) |
| <input type="checkbox"/> | 8. Calculate A to the power of B (don't use <i>Math.pow(x)</i> , B may be \pm) |
| <input type="checkbox"/> | 9. Check if A and B are primes or not |
| <input type="checkbox"/> | 10. Output the result properly formatted, with commas separating the thousands |

Your main method should only input the two numbers, and then call all 10 methods (functions) as appropriately. You may want to add a switch/case structure to implement a menu if you want some extra practice.

Using the code that we have written in class during this semester, re-write the algorithms into methods (functions) so that they can be easily debugged, called and reused.

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