

Question - 1

Javadoc

SCORE: 10 points

OOPS

Java 8

documentation

Given the solution to last week Successive Sums exercise, complete it with full javadoc. Class, field, constructor and both methods must be documented with a description of their purpose, a description of the parameters (if any) and of the return type (if any). Class should also have the @author tag.

Note that the only available test does not do anything, you just need to submit the documented code to pass the exercise.

For reference, here is the problem text for reference on what the class members are meant to:

Create a class *Number* with an integer field *n*, a method *get()* that returns the value of field *n*, and a method *add(Number other)* that takes as parameter another *Number* and returns a new instance of *Number* that holds the sum of the *n* fields from the two original instances.

The class will be used to calculate successive sums of integer numbers: given a sequence of *n* numbers, the successive sums is calculated as $((((i_0 + i_1) + i_2) + \dots) + i_n)$ where each sum is an invocation of the *add* method, and each parenthesis produces a new instance of *Number*.

Question - 2

Information Hiding

SCORE: 40 points

OOPS

Java 8

Field visibility

Create a class *Rectangle* with three fields: *width*, *height* and *area*. *Width* and *height* should be accessible from outside the class (i.e. *public*), but the *area* should not (i.e. *private*). The class should have a single constructor that takes *width* and *height* as parameters and initializes the *area* field. The class should expose a *getArea()* method that returns the value of the field *area*.