

# Software Design - JUnit Quiz

For this quiz you will develop test methods for the Calculator project you were shown in class. This project has not changed, but is reposted with this quiz. **Make sure you use the version of the project that is attached with this quiz, not the one that we edited in class.** As we did in class, you will be writing tests for the CalcEngine class. The test class has been created and a method that is executed before every test method is run has been created in that test class. Right now, that method creates a new CalcEngine object. You may add other code to this method if there are other actions you want to have happen before every test is run. There is also one test method in the class that is empty. Modify or delete this method as you wish.

Create the following test methods in the CalcEngineTest class.

1. A test method for the equals method that tests if 3 multidigit numbers, when all digits and the + operator have been entered correctly, are correctly added – the display value ends up with the correct result after the equals method is executed. (E.G. the keys 32+123+12= are correctly hit in order and the display value variable is correctly set to 167)
2. A test method for the applyOperator method that tests that this method returns the correct error message about a key sequence error when the minus sign is hit two times in a row. The first time the minus is hit it is in the correct sequence, but the second time is out of sequence. (E.G. the keys 42—are hit in order). Remember that the applyOperator method is a private method that gets called from other methods.

Remember what was said in class. The last method you call may not be the method being tested (equals and applyOperator in this case). Your job is to call the appropriate methods that hit the keys in the appropriate sequence for what is being tested and then to look at the appropriate result to see if we got what we should have gotten.

The only test methods that should be in this class are the 2 methods that you write for this quiz. If a test does not pass you are **not** required to find and fix the error in the code so that it passes the test.

When you finish, submit only the CalcEngineTest.java file. You have until midnight on Friday to complete the quiz. Anything submitted after that time without prior approval will get a 0 for the quiz.

**Points: 20**