Sophie has decided to open an animal washing service. She will bathe a dog for $0.50. Cats will be bathed for $3.00 per pound.

Write a class CashBox that records the total number of washes and amount of money Sophie has taken in.

Write a test class for CashBox. Your tester should include several cats and dogs and test that CashBox correctly reports the total washes and amount of money taken in.

Your solution should include at least four classes/interfaces. Follow all Java naming conventions, and use appropriate access control.

Your solution should include at least 3 of the following. Note that your use of these features should be legitimate, but if they're a bit contrived, that's ok.

superclass

abstract class

interface

generic class

generic method

JUnit test