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import java.util.ArrayList;

import junit.framework.TestCase;

/* Use the internets to figure out how to use ArrayLists. Try not to use autocomplete. */

public class ArrayListQuiz extends TestCase {

	public void testInitialize() throws Exception {
		assertNotNull(LearningArrayLists.createArrayList());
	}

	public void testAddToArrayList() throws Exception {
		ArrayList testList = new ArrayList();
		LearningArrayLists.addToArrayList(testList, new String());
		LearningArrayLists.addToArrayList(testList, new String());
		assertEquals(2,  testList.size());
	}

	public void testGetNumberOfItems() throws Exception {
		ArrayList testList = new ArrayList();
		testList.add(new String());
		testList.add(new String());
		testList.add(new String());
		assertEquals(3, LearningArrayLists.getNumberOfItems(testList));
	}

	public void testGetSomethingFromList() throws Exception {
		ArrayList testList = new ArrayList();
		testList.add(new String());
		testList.add("natch");
		testList.add(new String());
		assertEquals("natch", LearningArrayLists.getItem(testList, 1));
	}

	public void testListIteration() throws Exception {
		ArrayList testList = new ArrayList();
		testList.add("rad");
		testList.add("natch");
		testList.add("bounce");
		assertEquals("radnatchbounce", LearningArrayLists.iterateOver(testList));
	}

	public void testFindItem() throws Exception {
		ArrayList testList = new ArrayList();
		testList.add("rad");
		testList.add("natch");
		testList.add("bounce");
		assertEquals(2, LearningArrayLists.findItemOnList(testList, "bounce"));
	}

public void testReplaceItem() throws Exception {
		ArrayList testList = new ArrayList();
		testList.add("rad");
		testList.add("natch");
		testList.add("bounce");
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                LearningArrayLists.replaceItem(testList, 1, "sweet");
                assertEquals("rad", testList.get(0));
                assertEquals("sweet", testList.get(1));
                assertEquals("bounce", testList.get(2));
        }

        public void testInsertItem() throws Exception {
                ArrayList testList = new ArrayList();
                testList.add("rad");
                testList.add("natch");
                testList.add("bounce");
                LearningArrayLists.insertItem(testList, 1, "sweet");
                assertEquals("rad", testList.get(0));
                assertEquals("sweet", testList.get(1));
                assertEquals("natch", testList.get(2));
                assertEquals("bounce", testList.get(3));
        }


        /***************************and now for something much cooler*******************************/

        public void testTypedArrayLists() throws Exception {
                ArrayList<Integer> testList = LearningArrayLists.createTypedArrayList();
        }

        public void testAddStuff() throws Exception {
                ArrayList<Integer> testList = LearningArrayLists.createTypedArrayList();
                testList.add(new Integer(6));
                testList.add(new Integer(6));
                testList.add(new Integer(6));
                assertEquals(new Integer(18),  LearningArrayLists.addAllInteger(testList));
        }

        public void testConcatenateStrings() throws Exception {
                ArrayList<String> testList = LearningArrayLists.createStringTypedArrayList();
                testList.add("6");
                testList.add("6");
                testList.add("6");
                assertEquals("666",  LearningArrayLists.addAllString(testList));
        }

        /* now do this puzzle:
http://apcomputersciencetutoring.com/exam-review/candidatepool-free-response-practice-question/ */

}
```