

COMP 110/L Lecture 16

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Outline

- Looping over multiple arrays
- Testing with arrays

Looping Over Multiple Arrays

Same index variable can be used on multiple arrays

Example: `LoopTwo.java`

-Will print out as many pairs as whatever the shorter array is

Creating Arrays from Arrays

Similar pattern arises if trying to make an array from an array

Examples:

`CopyArray.java`

`CopyFirstThree.java`

Testing with Arrays

JUnit Recap

You've been using JUnit's `assertEquals` for awhile...

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```
import static org.junit.Assert.assertEquals;
```

-Have to have this line to make `assertEquals` available...

JUnit Recap

You've been using JUnit's `assertEquals` for awhile...

```
import static org.junit.Assert.assertEquals;

@Test
public void testSomething() {
    assertEquals(2, MyMethod.myMethod(1));
}
```

-Followed by tests later on that use `assertEquals`

JUnit with Arrays

Can use `assertArrayEquals` to look at array contents

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import static org.junit.Assert.assertArrayEquals;
```

-We have to import `assertArrayEquals`...

JUnit with Arrays

Can use `assertArrayEquals` to look at array contents

```
import static org.junit.Assert.assertArrayEquals;

@Test
public void testSomething() {
    assertArrayEquals(new int[]{1, 2, 3},
        MyMethod.myMethod(1));
}
```

- ...which can subsequently be used with an array
- This snippet assumes that `MyMethod.myMethod` returns an array of ints (`int[]`)

Example

- `ParseStrings.java`
- `ParseStringsTest.java`

Writing Tests for Loops over Arrays

- Which tests are interesting tends to be problem-specific
- Often of value: arrays of length 0, 1, and 2