

Symmetric Numbers - Test-After Ping Pong Pairing

Helloooo! I'm Tera



Yo! Its Pico...



Meet Tera and Pico, our programmers (algo-buffs), who are pairing to solve the Symmetric numbers problem... They don't quite believe in TDD, but certainly value good unit tests.

Here's the problem...



Generates 100 random numbers between 1000-9999. Among the generated numbers find and display the number, which are "axially symmetric" .i.e. YYYY

hmm....



What are you thinking...



easy peasy... axially symmetric is similar to string palindrome problem. I can solve 3 lines. Pass the keyboard...



Be my guest...



Here we go...



...While the IDE comes up, Pico takes control of the keyboard...

I'll just write a static method for now, which will take the number and return true or false



```
public class NumberUtil {  
    public static boolean isSymmetrical(long number) {  
        String orgNum = String.valueOf(number);  
        String revNum = new StringBuilder(orgNum).reverse().toString();  
        return orgNum.equals(revNum);  
    }  
}
```



Interesting hack...now let me write some tests



YAY!

What's this @RunWith (Parameterized



```
@RunWith(Parameterized.class)
public class NumberUtilTest {
    private boolean symmetrical;
    private long number;

    @Parameters
    public static List<Object[]> values() {
        return new ArrayList<Object[]>() {
            {
                add(new Object[] { 1, true });
                add(new Object[] { 10, false });
                add(new Object[] { 11, true });
                add(new Object[] { 12, false });
                add(new Object[] { 111, true });
                add(new Object[] { 1234554321, true });
                add(new Object[] { 12345654321L, true });
            }
        };
    }

    public NumberUtilTest(long number, boolean symmetrical) {
        this.number = number;
        this.symmetrical = symmetrical;
    }

    @Test
    public void symmetricalNumbersAreSameWhenReversed() {
        assertEquals(symmetrical, NumberUtil.isSymmetrical(number));
    }
}
```



Ahh...its basically a way to run the same tests with multiple parameters so we don't duplicate the tests.



Awesome! Let's run the t



Yup...



Finished after 0.012 seconds

Runs: 7/7 Errors: 0 Failures: 0

org.pairing.book.NumberUtilTest [Runner: JUnit 4] (0.001 s)

- [0] (0.001 s)
- [1] (0.000 s)
- [2] (0.000 s)
- [3] (0.000 s)
- [4] (0.000 s)
- [5] (0.000 s)
- [6] (0.000 s)

And it's a green bar! This parameterized test is pretty cool. Now I need to go a refactor some of my previous tests with duplication.



Let's check this in and let it trigger the CI



Game Over!

Good call!

