



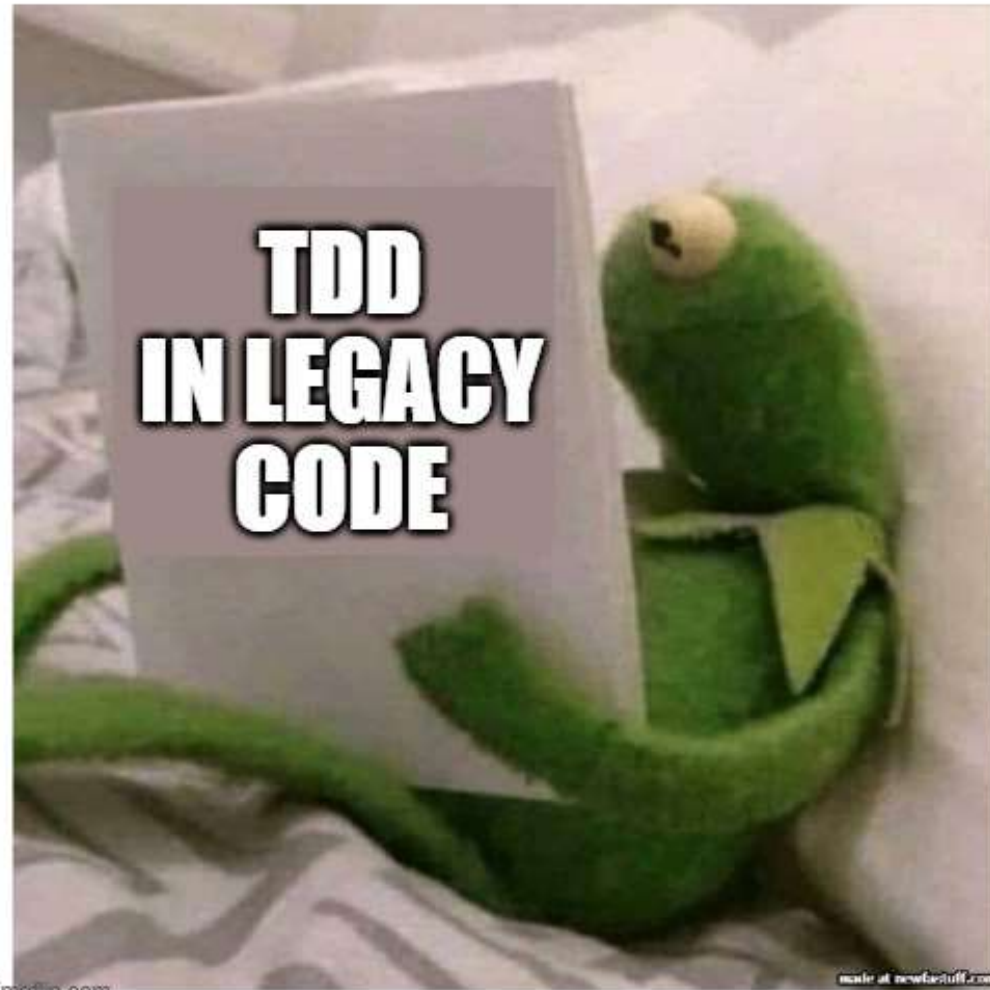
CONF42

JANUARY 27 2022

PYTHON

Gil  
Zilberfeld

CTO  
TestinGil



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made at newsteststuff.com



Hello!

**I AM GIL ZILBERFELD**

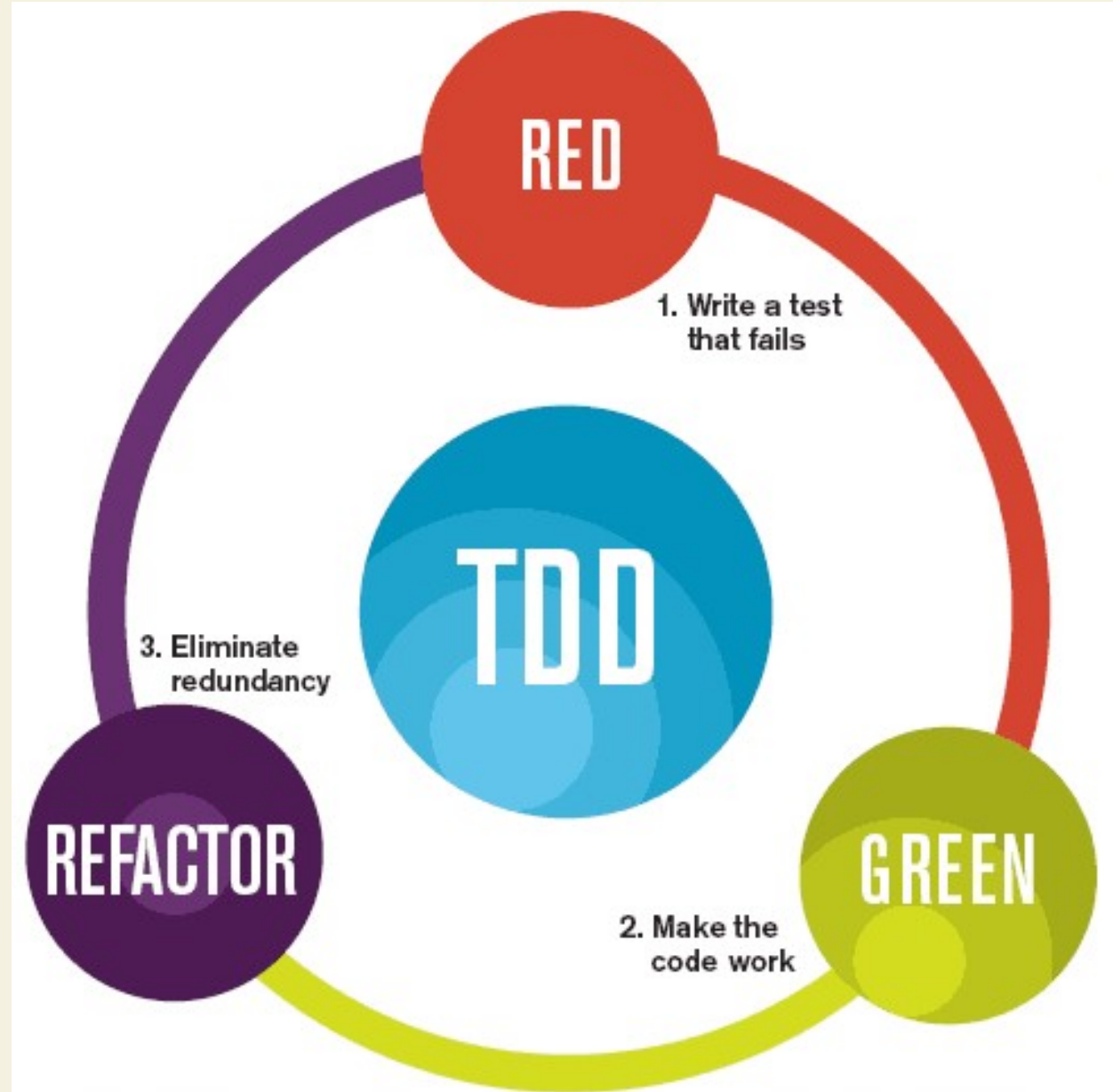


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The mantra of Test-Driven Development (TDD) is "red, green, refactor."

The TDD  
cycle

```
@Test
@DisplayName("My First Test")
void canAddTwoNumbers() {
    Calculator calc = new Calculator();
    int result = calc.add(3,5);
    assertThat(result, is(8));
}
```

```
@Test
@DisplayName("My First Test")
void canAddTwoNumbers() {
    Calculator calc = new Calculator();
    int result = calc.add(3,5);
    assertThat(result, is(8));
}
```

```
public class Calculator {

    public int add(int i, int j) {
        return i+j;
    }

}
```

```
@Test
@DisplayName("My First Test")
void canAddTwoNumbers() {
    Calculator calc = new Calculator();
    int result = calc.add(3,5);
    assertThat(result, is(8));
}
```

```
public class Calculator {

    public int add(int firstNumber,
        int secondNumber) {
        return firstNumber+secondNumber;
    }

}
```



## In the real world

- ◎ Examples are too simplistic
- ◎ Real dependencies cause havoc
- ◎ The code resists
- ◎ Changing the code for tests is risky

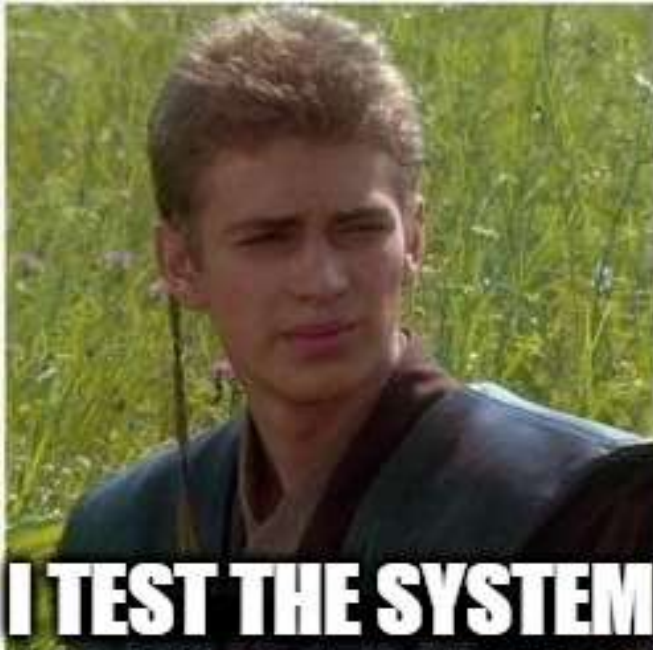




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## Principles

- ◎ Think about what you want to do, how would you know it worked?
- ◎ Add some tests for existing code
- ◎ Do some pre-refactoring (clean the workspace)
- ◎ Make it public (if needed)
- ◎ Introduce the change through TDD







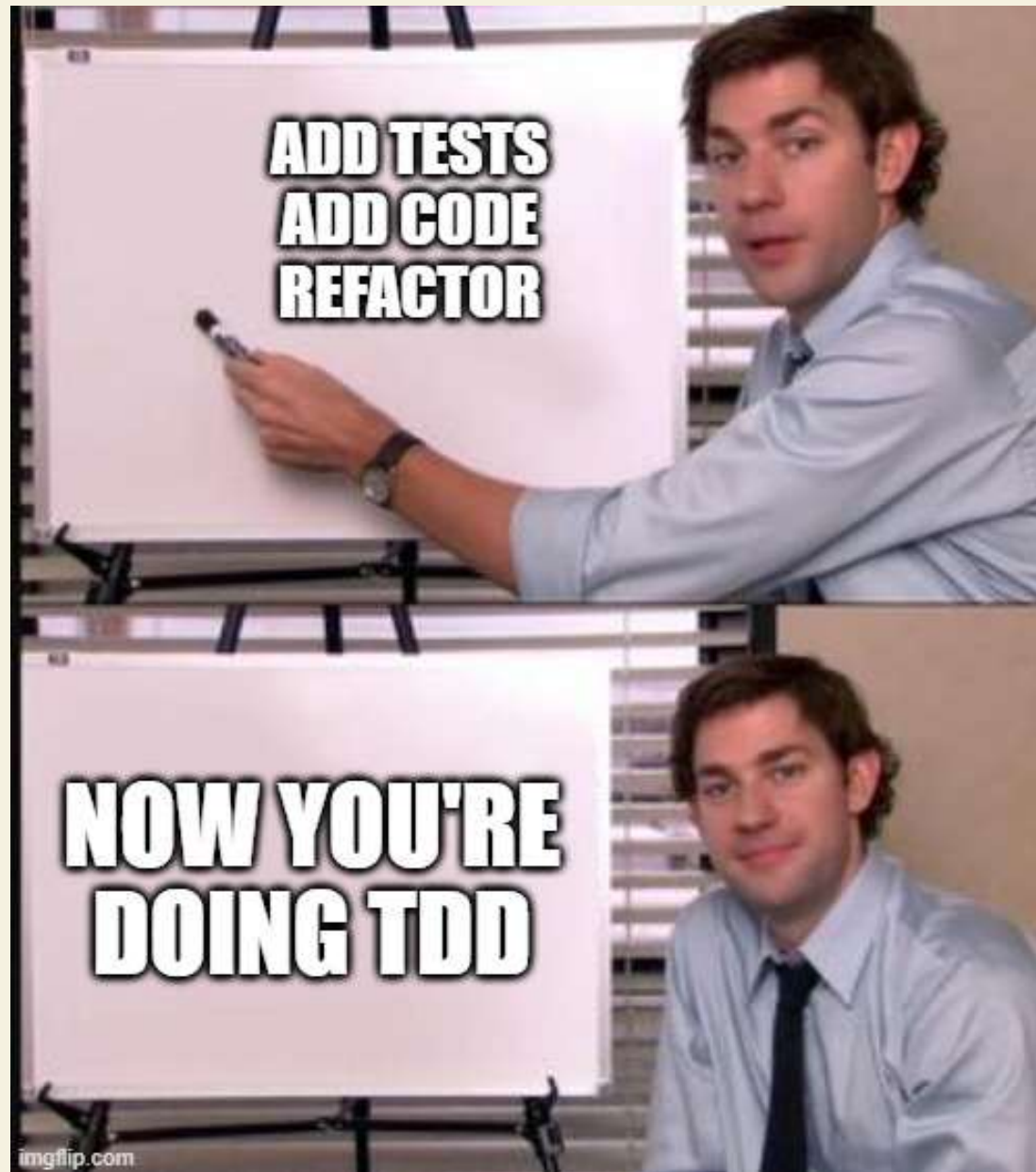
**CODE BEFORE  
REFACTORING**

**CODE AFTER  
REFACTORING**

Corporate needs you to find the differences  
between this picture and this picture.



**They're the same picture.**





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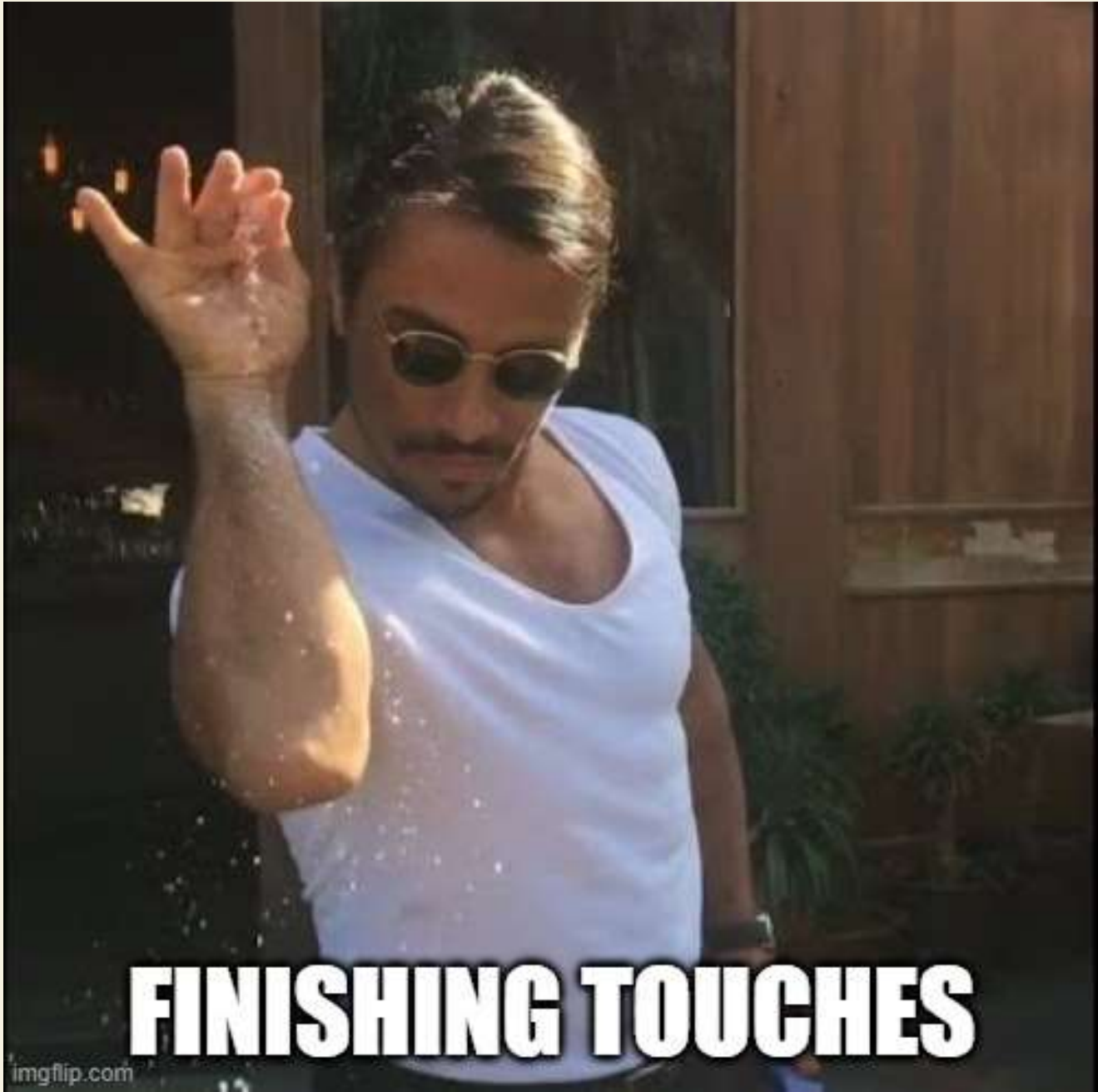
**THE MESSY  
CALCULATOR**





**DEMO DAY**

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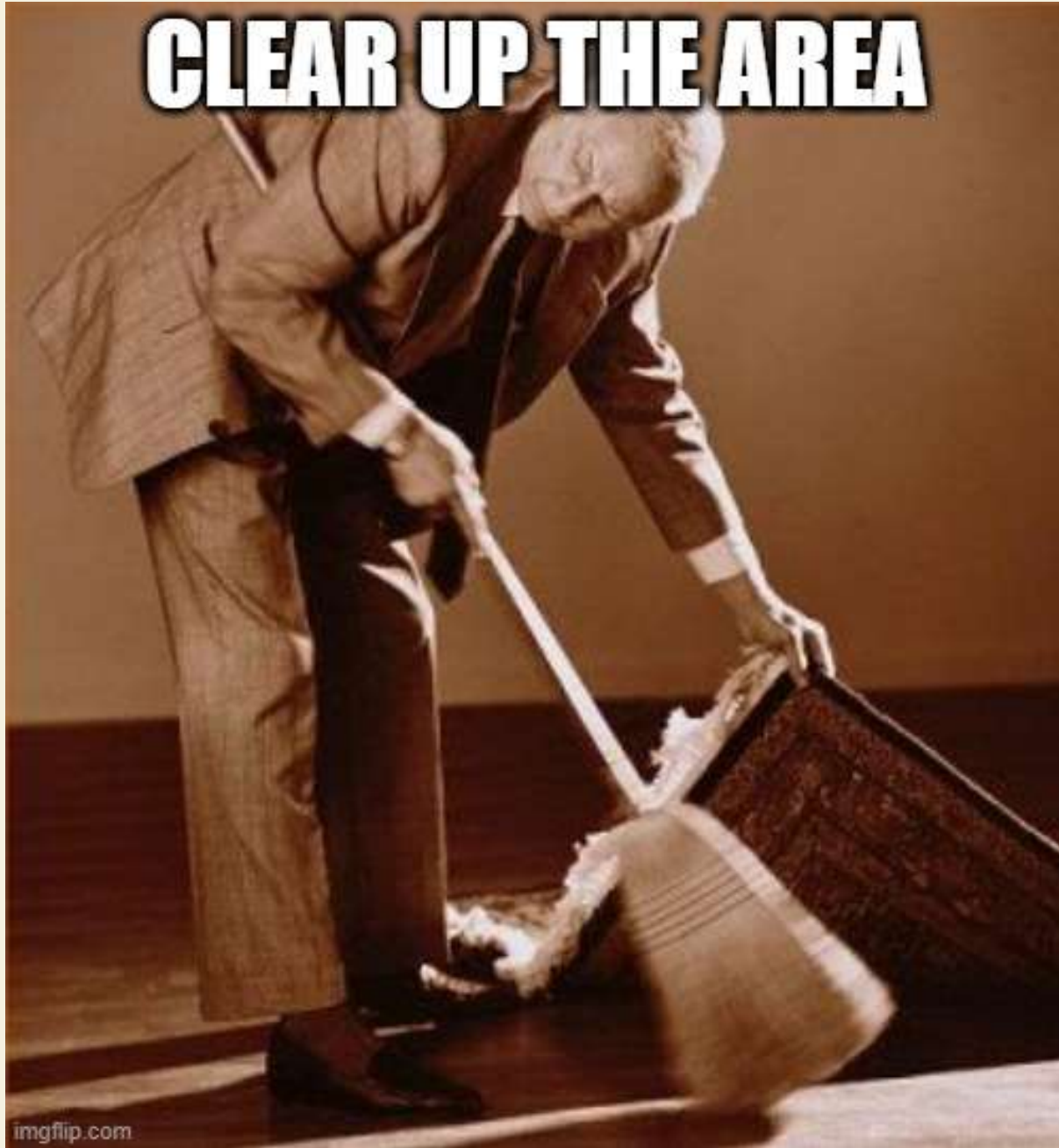




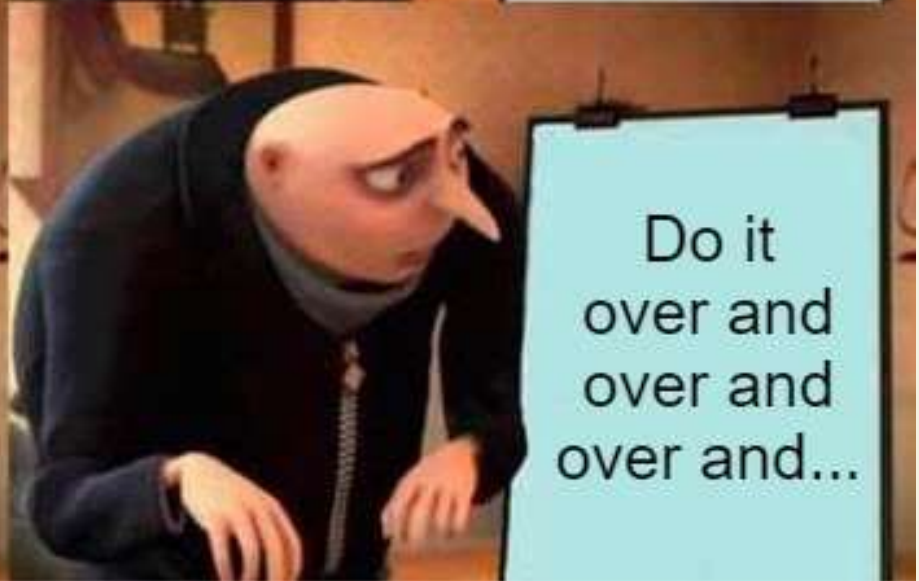
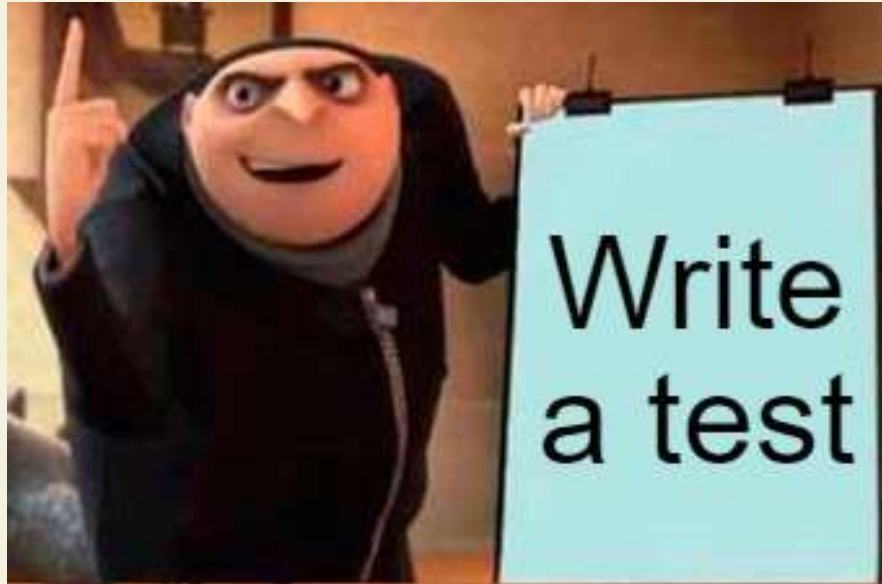
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**CLEAR UP THE AREA**



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Thanks!

**ANY QUESTIONS?**

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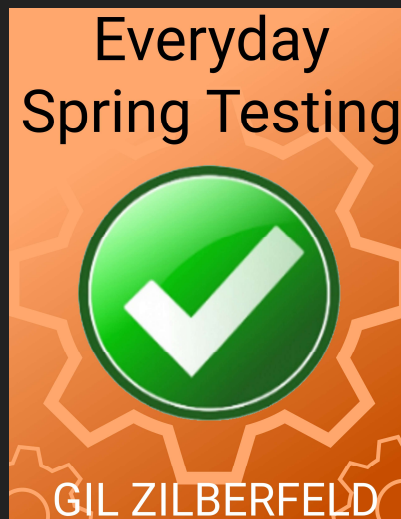
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