Python Testing 101 with pytest

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What Is a Test?

A test is code that runs to check the validity of other code

CAUTION

TESTING IN PROGRESS DO NOT DISTURB

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Why Would I Test?

- Prove that the code works like I think it should
- Give examples to others of how code is used
- Get a safety net for future changes

Pop Quiz!

42 == 42

True

4 != 2

True

7 > 9000

False

7 < 9000

True

10 >= 10

True

20 <= 10

False

'Hello' in 'Hello World!'

True

'security' in 'IoT'

False

The Quiz

```
42 == 42
4 != 2
7 > 9000
7 < 9000
10 >= 10
20 <= 10
'Hello' in 'Hello World!'
'security' in 'IoT'
```

pytest API

```
assert 42 == 42
assert 4 != 2
assert 7 > 9000
assert 7 < 9000
assert 10 >= 10
assert 20 <= 10
assert 'Hello' in 'Hello World!'
assert 'security' in 'IoT'
```

Congratulations!

You now know the bulk of the pytest API.



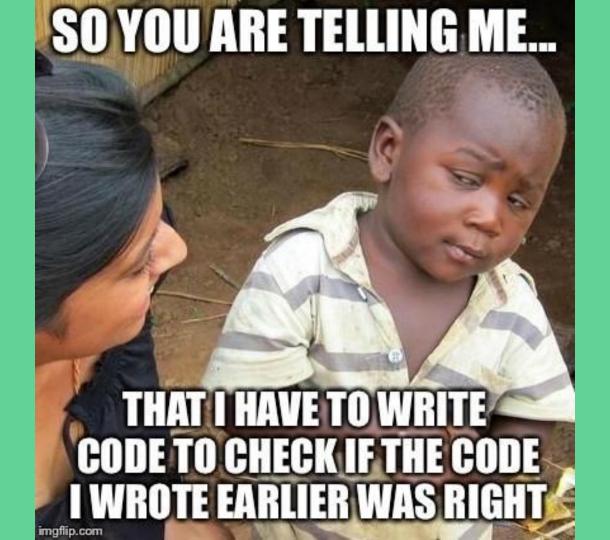
Hold on, what's pytest?

- The most popular Python package for testing
- The basis for a rich ecosystem of testing plugins and extensions
- Not unittest

Why not unittest?

assert

- assertEqual
- assertNotEqual
- assertTrue
- assertFalse
- assertIs
- assertIsNot
- ... + at least 6 more



Let's Code!

Thanks!

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