

COMP 198

Testing & Debugging

Ahmet Uysal

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1. Debugging
OOOO

2. Testing with doctest
OOO

Agenda

1. Debugging

2. Testing with doctest



Example Scenerio

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1. Debugging

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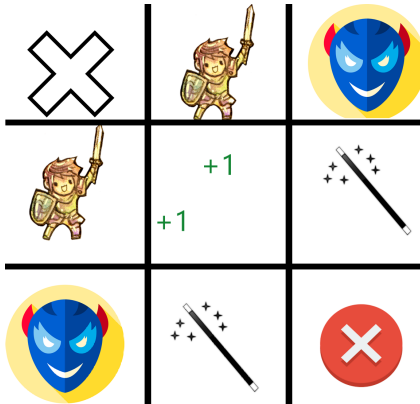
2. Testing with doctest

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Example Scenerio



Long Lasting Rivalry



Magic

```
if math.sqrt(villain.age * hero.age) < 10:
    hero.age += 2
    villain.age -= 1
else:
    hero.age -= 2
    villain.age += 1
```

Live Demo

You can get the starter code from here:
github.com/koltpython/python-workshops

Live Demo

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github.com/koltpython/python-workshops Included topics:

- Breakpoints
- Stepping
- Watching
- Inline debugger
- Evaluating Expressions

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- Makes harder to create bugs indirectly
- Automates functionality checking (**AUTOGRADERS!**)

doctest module: Create tests while writing docstrings

What is a docstring?

```
"""  
Returns the length of the given month name.  
"""  
  
def month_length(month) :  
    .  
    .  
    .
```

Live Demo

Let's implement the fibonacci function together.