Madagascar IEES Training

Introduction to Python

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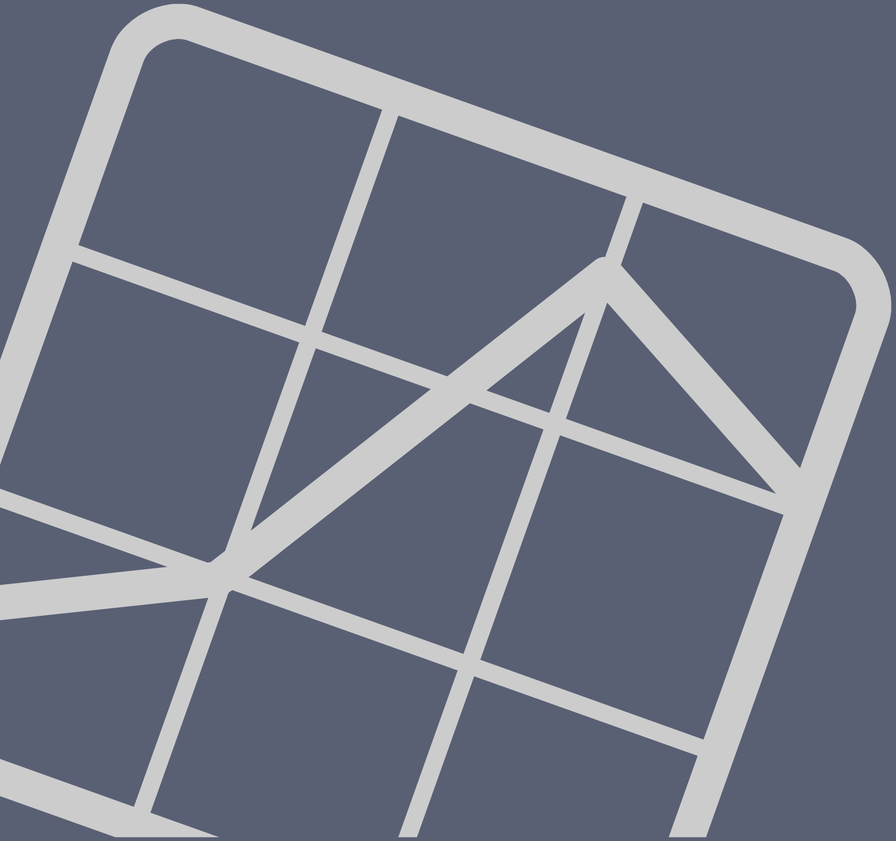


Overview

Talk: Introduction to python

Exercises: Python tutorial

Exercises: Advanced python problems

Talk: No more PhP - Web programming in Python

Exercises: Python websites

Talk: Javascript in Meerkat Frontend

Exercises: Editing Meerkat Frontend

Where?

Meerkat Abacus

Meerkat Frontend

Meerkat API

Meerkat Hermes

Meerkat Nest

Meerkat Auth

Why?

- Cross platform
- 4th most popular code language (After C, Java, C++)
- Very few lines do an awful lot!
- You can do almost anything you want in Python
- Stats and science speciality

What?

A scripting language

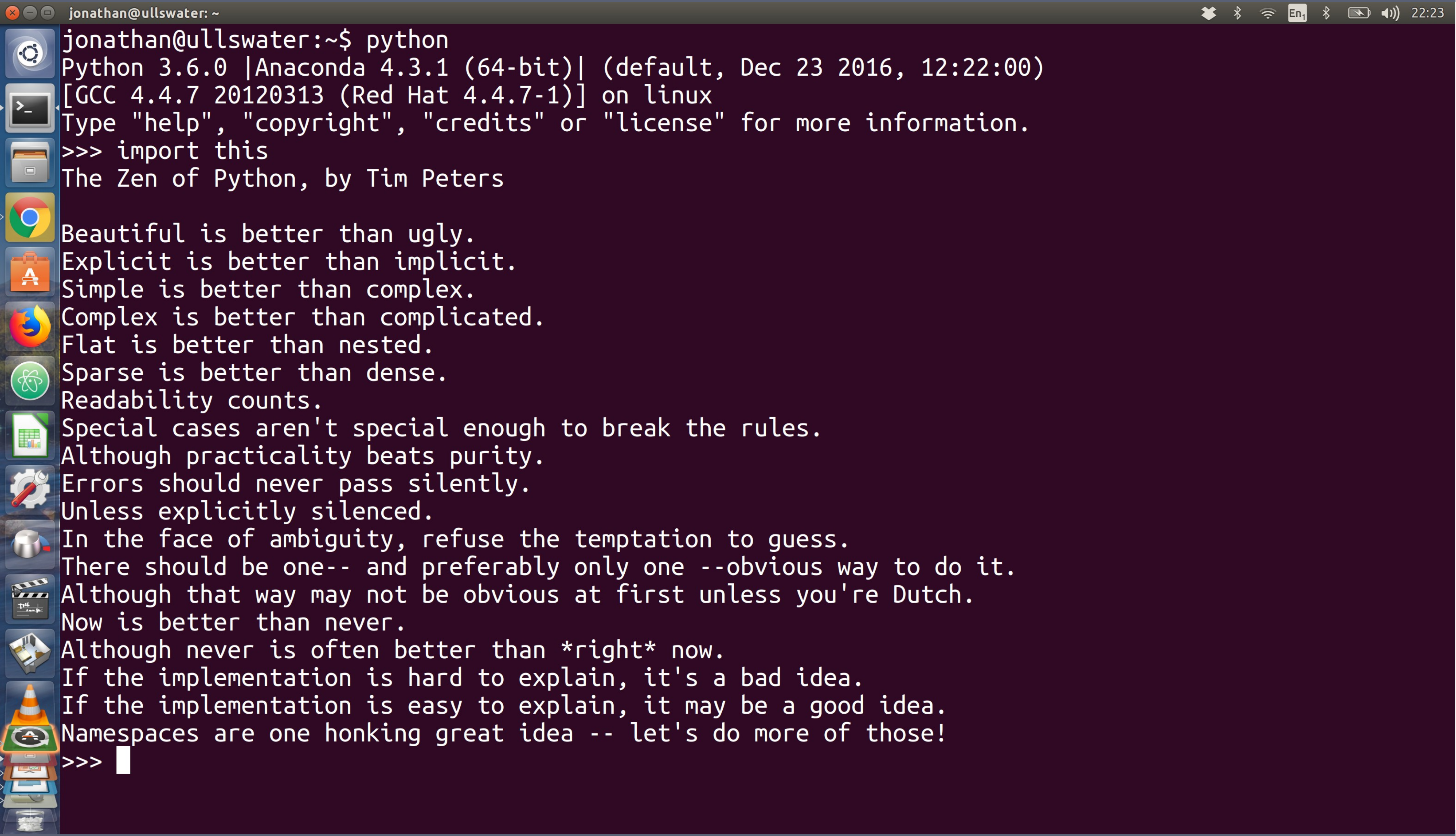
An interpreted language

An object orientated language

Dynamically typed

Functional programming support

How?



```
jonathan@ullswater:~$ python
Python 3.6.0 |Anaconda 4.3.1 (64-bit)| (default, Dec 23 2016, 12:22:00)
[GCC 4.4.7 20120313 (Red Hat 4.4.7-1)] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import this
The Zen of Python, by Tim Peters

Beautiful is better than ugly.
Explicit is better than implicit.
Simple is better than complex.
Complex is better than complicated.
Flat is better than nested.
Sparse is better than dense.
Readability counts.
Special cases aren't special enough to break the rules.
Although practicality beats purity.
Errors should never pass silently.
Unless explicitly silenced.
In the face of ambiguity, refuse the temptation to guess.
There should be one-- and preferably only one --obvious way to do it.
Although that way may not be obvious at first unless you're Dutch.
Now is better than never.
Although never is often better than *right* now.
If the implementation is hard to explain, it's a bad idea.
If the implementation is easy to explain, it may be a good idea.
Namespaces are one honking great idea -- let's do more of those!
>>> 
```

How?

Key features:

- Uses white-space and indentation!
- No curly braces, no semi colons.
- Can use Python console
- Can run Python files
- Statements are very simple!

```
for x in array:
    print(x)
```

Guido van Rossum

Exercise

A simple French Python Tutorial

python.50webs.com