Introduction to Programming

Lesson 1: Introduction & Variables

Python

Lesson Content

1

Agenda Today

An Introduction

Variables

Practice

Instructor

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previously a swim instructor

Outline of content

Variables - booleans, strings, ints

if/else statements

Functions - print versus return

Lists - for/while loops

Outline of content

Object-Oriented Programming

Data Structures - Stacks, Queues

Recursion

Trees/search algos - Big O, Omega, Theta (informal)

Content Delivery

online synchronous,
with a recording.

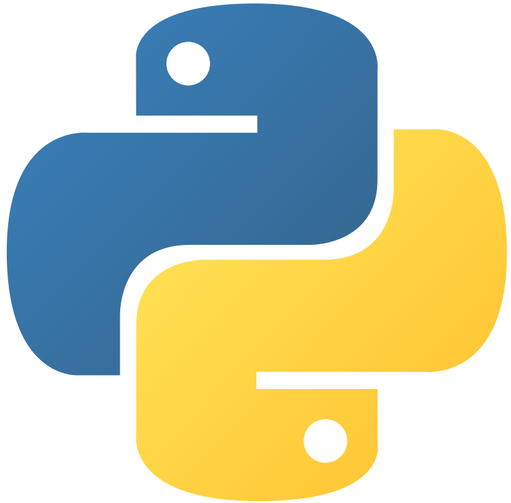
Lecture Slides

available upon request

Setup Python

Setup Python - Tools

Visual Studio Code



Python

What is Python?

What is Python?

It's a snake!

(what a cutie)

What is Python?

nah, it's this!

a language you can program in.

(ik... way less cuter :( )

What is Python?

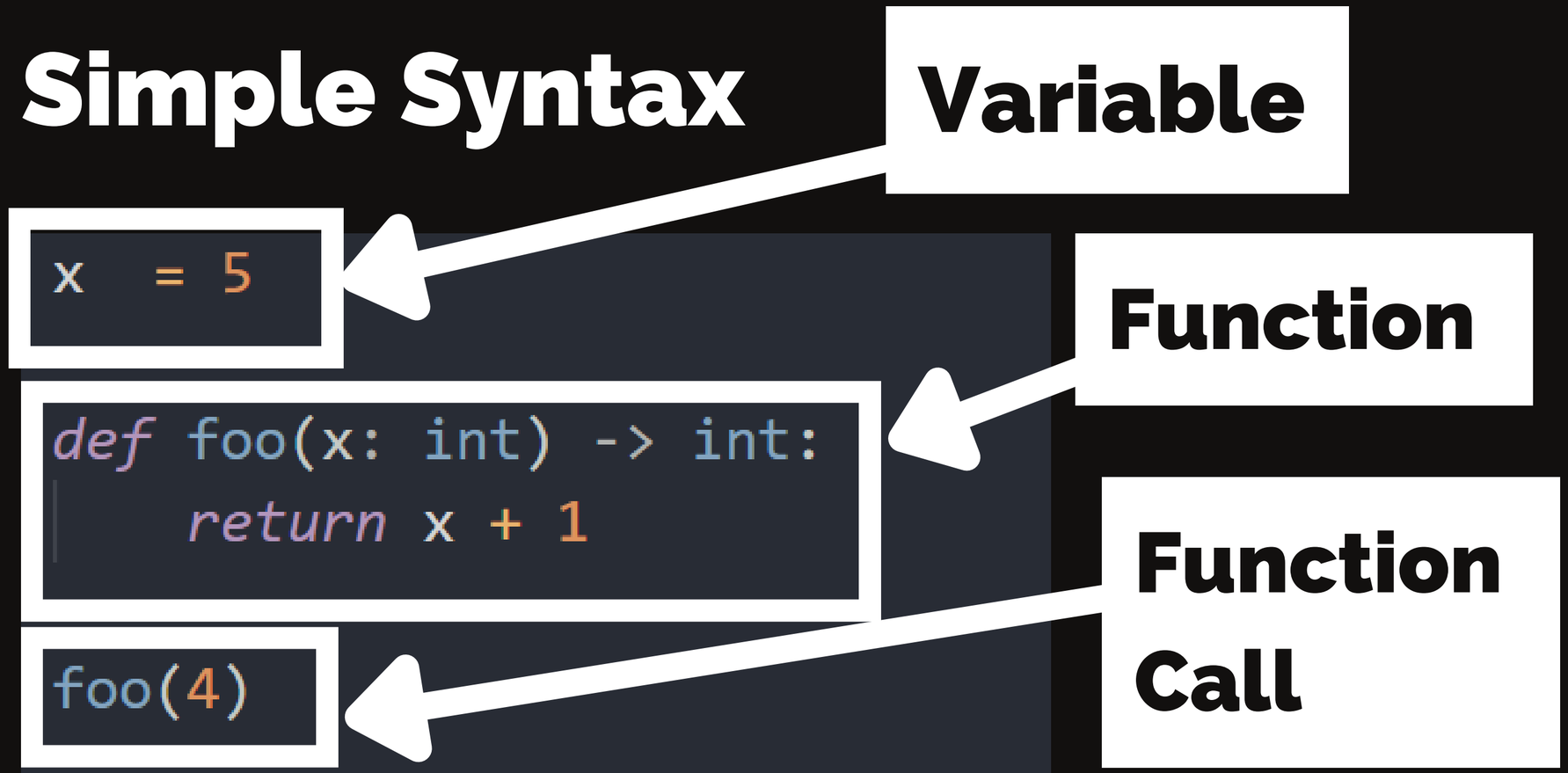
Dynamic

OOP

Scripting

Advantages of Python

Simple Syntax



Variables

Variables

Definition

Variables are data values that can change when the user is asked a question, for example, their age.

More:
https://www.bbc.co.uk/bitesize/guides/zc6s4wx/revision

Variables in Python

```
sample_string = "" # string
sample_float = 0.03 # float
sample_int = 2 # integer
sample_bool = 0 # boolean (0 = false, >1 = true)
sample_bool2 = True # boolean (True, False)
# ... many others
```

DEMO

Questions?

Next Time

Strings & Booleans

If/else statements