

# Fresno freeCodeCamp: Python

Introduction to new curriculum!

8/1/2020



# Introductions

1. Name
2. First time to freeCodeCamp?
3. Have you used Python before?
4. Favorite ice cream flavor?





# Introduction to Python

Python is an interpreted, high-level, general-purpose programming language.

[https://en.wikipedia.org/wiki/Zen\\_of\\_Python](https://en.wikipedia.org/wiki/Zen_of_Python)

- Beautiful is better than ugly.
- Explicit is better than implicit.
- Simple is better than complex.
- Complex is better than complicated.
- Readability counts.



# What makes Python special?

- Very utilitarian and provides many options to get a job done.
- Community is huge and welcoming. Huge libraries for just about everything.
- Pip package manager
- White space is enforced

Which code is indented correctly to print "Yes" if x = 0 and y = 10?

☐

```
if 0 == x:  
if y == 10:  
    print("Yes")
```

☐

```
if 0 == x:  
    if y == 10:  
        print("Yes")
```

☐

```
if 0 == x:  
if y == 10:  
    print("Yes")
```

☐

```
if 0 == x:  
    if y == 10:  
        print("Yes")
```

Click the button below to check your answer.

Check your answer



# FCC: What was added!

1. Scientific Computing with Python
2. Data Analysis with Python
3. Information Security
4. Machine Learning with Python

All new curriculum starts off lecture based, with youtube videos attached to each lesson. After each lecture, exercises will be presented. At the end of the exercises, projects are presented. Certification is awarded after completion of all material.



# Installation and setup

Check to see if its already installed:

Go to console/terminal and type python3.

```
everyday@everyday:~$ python3
Python 3.8.2 (default, Apr 27 2020, 15:53:34)
[GCC 9.3.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
```

If not, then go to <https://www.python.org/downloads/>

And install python3 on your machine.



# Scientific Computing with Python Certification

- Goes over the basics of python as a language. Python for Everybody.
- Next will go over Scientific Computing with Python Projects.
- All lessons have a video attached. Watch the video and try to answer the question.
- Use REPL when confused.

What will print out after running this code:

```
1 width = 15
2 height = 12.0
3 print(height/3)
```

☐ 39

☐ 4

☐ 4.0

☐ 5.0

☐ 5

Click the button below to check your answer.

Check your answer



# Data Analysis with Python Certification

Broken up into three courses:

1. Data Analysis with Python Course
2. Numpy
3. Data Analysis with Python Projects







# Information Security Certification

Broken into three parts. You should know Javascript before starting this section:

1. Information Security with Helmetjs
2. Python for Penetration Testing
3. Information Security Projects





# Machine Learning with Python Certification

1. Tensorflow
2. How Neural Networks work
3. Machine Learning with Python Projects



# Links

- <https://www.freecodecamp.org>
- <https://www.freecodecamp.org/news/python-curriculum-is-live/>



# Questions?

