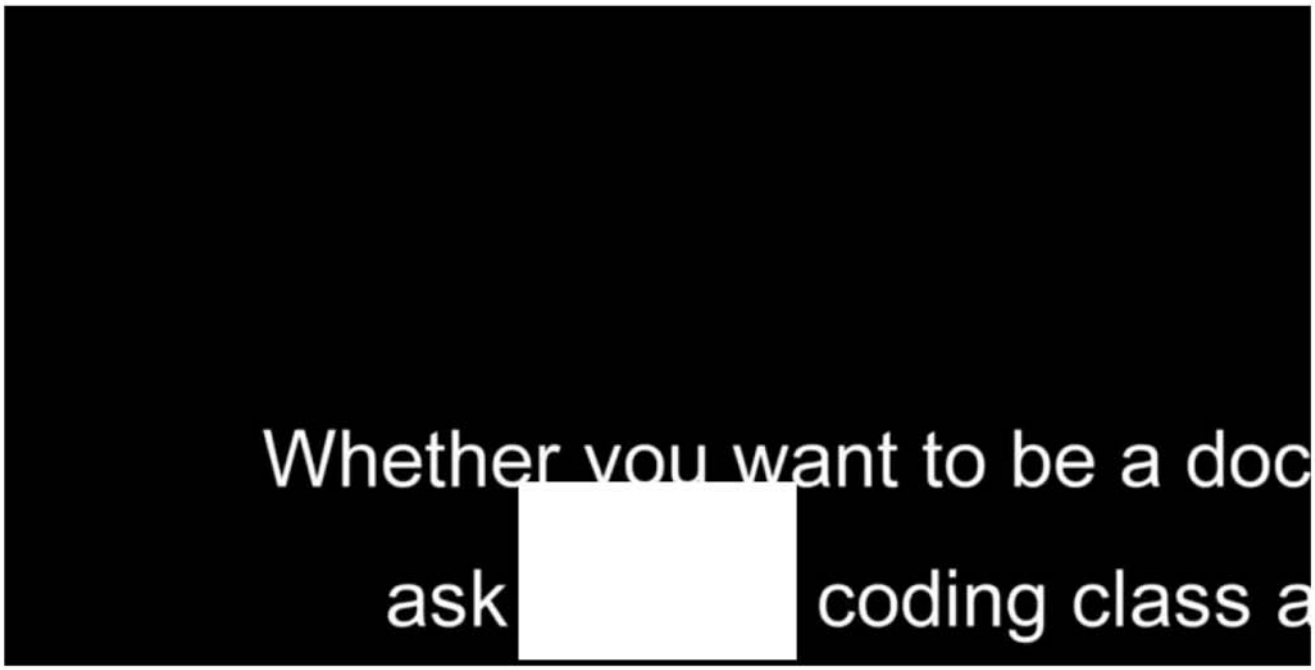
DevNet Associate v1.0

/ Course Introduction / Python

Python

1.3.1

The Power of Code



5:44

1.3.2

Python Programming

Python is an easy to learn programming language that you will use throughout this course. Why should you learn Python? You will need to become familiar with basic Python to complete many of the labs in this course. In addition to this, the Python Essentials course (see the link in Student Resources) names a few factors that make Python a great tool for learning basic coding:

- It is easy to learn - the time needed to learn Python is shorter than for many other languages; this means that it's possible to start the actual programming faster.

- It is easy to use for writing new software - it's often possible to write code faster when using Python.
- It is easy to obtain, install and deploy - Python is free, open and multiplatform; not all languages can boast that.
- If you're not familiar with any other languages, Python is great to begin with, because it will give you a solid foundation and allow you to learn other programming languages (e.g., C++, Java, or C) much easier and much faster. Learning Python is fun and trendy!

1.3.3

Lab - Python Programming Review

This Python Programming Review lab is designed to establish your level of Python expertise before you continue with the DevNet Associate course.

In this lab, you will complete the following objectives:

- Part 1: Launch the DEVASC VM
- Part 2: Start Python and VS Code
- Part 3: Review Data Types and Variables
- Part 4: Review Lists and Dictionaries
- Part 5: Review the Input Function
- Part 6: Review If, For, and While Functions
- Part 7: Review Methods for File Access

Python Programming Review

1.3.4

Quiz - Python Review

1. A student is learning Python using the interactive interpreter mode. The student issues the commands:

```
>>> routers=[]
>>> switches=[]
>>> devices=[\"RT1\", \"RT2\", \"RT3\", SW1\", \"SW2\", \"SW3\"]
>>> devices=devices + [\"RT4\", \"SW4\"]
>>> for i in devices:
            if \"R\" in i:
                  routers.append(i)
            else: switches.append(i)
>>> switches
```

What is the result?

- ['SW1', 'SW2', 'SW3']
- ['SW4', 'SW1', 'SW2', 'SW3']
- ['SW4']
- ['SW1', 'SW2', 'SW3', 'SW4']
- ['SW4', 'SW3', 'SW2', 'SW1']

2. A student is learning Python in the interactive interpreter mode. The student issues the commands:

```
>>> devicenames=[\"RT1\", \"RT2\", \"SW1\", \"SW2\"]
>>> devicenames[-1]
```

What is the result?

- ['RT2', 'SW1', 'SW2']
- SW2
- RT1
- an error message
- SW1

3. A developer needs to check the version of the running Python package. Which command should the developer use?

- **python3 -i**
- **python3 -V**
- **python3 -q**
- **python3 --v**

4. A student is learning Python in the interactive interpreter mode. The student issues the command:

```
>>> type(True)
```

What is the data type reported by Python?

- integer
- string
- float
- Boolean

5. Which Python programming function is used to display output?

- print
- while
- for
- if

Check Show Me

Reset

1.3.5

How did you do on the Python Programming Review Lab?

How did you do on your Python Programming Review Lab? If you had trouble with this lab, we recommend you spend some time taking the Python Essentials course listed in the Student Resources page. You'll find a link to the course in the More Courses table near the bottom of that page. It's free, online, and self-paced.

1.2 Linux

1.4 Course Introduction Summary