:00 Hello and welcome to this python for cybersecurity learning path. In this video, we're going to start out with an introduction to python and discuss why we've selected python and some of the requirements for this path.

0:14 So why are we doing a python for cybersecurity course? Well, there's three main factors that contributed to this decision. The first of these is popularity. So python is one of the if not the most popular programming languages in existence. And in addition to that it's also one of the fastest growing and so using python for this course and for automating cybersecurity functionality simply makes sense. Part of this popularity comes from the second reason we chose python for this course. It's simplicity. Python has a very simple and readable syntax, which makes it easy to learn and use and also makes it very easy to write quick scripts in python. And so this simplicity is useful both from a training perspective. This is an easily explained language when we're talking up through the various python scripts will be using in this path. And also in your day to day work as a cybersecurity worker, it's easy to write up a python script that can get the job done and probably will be able to do so faster than with C plus plus, java and similar languages. The third factor that influenced the decision to use python for this course is python's capabilities. So python is very, very extensible. There's a massive number of python libraries out there and so were able to access a great deal of built in functionality just by importing preexisting third party libraries. And so this makes this language very useful for cybersecurity because we can easily access windows or Linux system components or read network traffic off the wire without writing complex code ourselves. And so these are the three main reasons we're using python for our cyber security code here.

2:24 And so how do you prepare for this learning path? So this learning path is designed to be interactive and we're going to drive it by demonstrations, I mentioned in our intro video that we're going to be basing this path structure off the miter attack and shield frameworks. And so the code that will take a look at and run in this course, will be designed to achieve the objectives of specific attack and shield techniques. And these various techniques map perfectly to real world cyber security use cases. So the code that we look at in this learning path is actually useful for the job and not just purely theoretical and so as much as possible, all of the python code will be completely explained. And so we can't walk through how every single line of code works in excruciating detail, but we'll try to make sure that you understand what's going on in the code and how it works. And so for this reason, prior python experience is useful but not required. So we're hoping that throughout the courses and videos and this learning path to be able to get a little bit of exposure to python and feel more and more comfortable with the language as we talk about how to use it for cyber security. And so in this learning path, since it's so interactive, the ability to create and run python code is essential. So we've got a number of demonstrations in this course and they use a combination of both Windows and Linux operating systems. As much as possible these demonstrations are platform agnostic, but some of them must be run on one system or the other. For example, when we have demonstrations that are interacting with the Windows registry, it's necessary to run those pieces of code on Windows rather than Lennox. And so if you only have access to Lennox systems, there might be certain pieces of code that you won't be able to run in this course. However, you'll be able to see how they work when we demonstrate them in the course.

4:44 And then finally, it's important to know that the sample Python code will be looking at is written in python three. So at this point, Python three is the only officially supported Python version and so anything in Python two might not work properly in three. And so it's possible that some of the code in this course will not work properly. If you try to run it using a python two version, and so please, before you start working through this learning path, install a version of python three to make sure everything is going to run smoothly. Thank you.