

Python for automation

Work with files in Python

- Video:** Access a text file in Python  
3 min
- Reading:** Import files into Python  
20 min
- Video:** Parse a text file in Python  
2 min
- Lab:** Activity: Import and parse a text file  
40 min
- Lab:** Exemplar: Import and parse a text file  
20 min
- Video:** Develop a parsing algorithm in Python  
6 min
- Lab:** Activity: Create another algorithm  
50 min
- Lab:** Exemplar: Create another algorithm  
20 min
- Quiz:** Portfolio Activity: Update a file through a Python algorithm  
9 questions
- Reading:** Portfolio Activity Exemplar: Update a file through a Python algorithm  
10 min
- Practice Quiz:** Test your knowledge: Work with files in Python  
4 questions

Debug Python code

Review: Python in practice

Congratulations on completing Course 7!

# Activity: Create another algorithm

Open Lab

Instructions

### Introduction

In this lab, you will open a notebook environment to practice developing another algorithm in Python. You'll be presented with a security scenario to explore throughout the lab. You'll develop a new algorithm that parses a file containing IP addresses that are allowed to access restricted content and removes addresses that no longer have access.

### What you'll do

You have multiple tasks in this lab:

- Import a text file containing an allow list and store it as a string
- Develop a parsing algorithm that removes IP addresses that no longer have access to restricted information from the allow list

### Lab instructions

#### Start the lab

From this page, click **Open Lab**. The notebook that contains your lab will open in a new browser tab.

Complete all the tasks in this lab before moving on. The next course item will be an exemplar of a completed lab. You'll be able to compare the code and text responses in the exemplar to the ones that you enter in this lab.

#### End the lab

When you have completed all the tasks and answered all the questions in the lab, you can close the browser tab containing the lab. (The changes you have made to the lab will be saved, and if you click **Open Lab** again, you can access your previous work in the lab.)

Sometimes you need to refresh your Coursera page in order for your progress to be registered. If you refresh this page after you complete your lab, the green check mark should appear.

#### Lab features

As you complete the lab, note the following features:

- Tasks:** Step-by-step instructions in each task lead you through the lab.
- Questions:** Reflection questions offer moments to pause and think about concepts and your output as you move through the lab.
- Hints:** Hidden hints provide optional suggestions you can use to complete your work.

**Note:** After this lab and its exemplar, there is a connected portfolio activity. Through the portfolio activity, you will be able to describe what you accomplish in the lab in a format that you can share with potential employers.