Activity: Develop an algorithm

Open Lab

Instructions

Introduction

In this lab, you will open a notebook environment to practice developing algorithms in Python. You'll be presented with a security scenario to explore throughout the lab. You'll write an algorithm that connects users to their assigned devices.

What you'll do

You have multiple tasks in this lab:

- Use the `.append()` and `.remove()` methods to manage a list of users and a list of user devices
- Indicate if a user is approved to access the system
- Work with indices and the `.index()` method to determine if a specific device corresponds to a specific user

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.