

# Activity: Create more functions

Open Lab 

## Instructions

### Introduction

In this lab, you will open a notebook environment to further practice working with functions in Python. You'll be presented with a security scenario to explore throughout the lab. You'll use built-in functions to work with a list of failed login attempts per month. You'll also define a function that will help you analyze login attempts.

### What you'll do

You have multiple tasks in this lab:

- Apply the built-in functions `max()` and `sorted()` to a list of failed login attempts
- Define a function that compares the logins for the current day to an average
- Return information from the function that you created

### 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.