



Data Boot Camp
Lesson 8.1



The Big Picture





Bootcamp Pointer

We're reaching a conceptually heavy point in the curriculum. This might feel like lots more work, but trust the process! Attend Office Hours, and ask for help.

Module 8

This Week: ETL

This Week: Extract, Transform, and Load (ETL)

By the end of this week, you'll be able to

01

Extract data by using Python and Pandas.

02

Transform and clean data by using Python and Pandas.

03

Parse string data into a Python dictionary.

04

Use list comprehensions to make code more readable.

05

Use regular expressions to manipulate string data.



This Week's Challenge

You'll perform the ETL process on a new dataset. You'll have the option of using Pandas functions, list comprehensions, and regular expressions. You will then load the data into a PostgreSQL database.



Career Connection

How will you use this module's content throughout your career?

Module 8

How to Succeed This Week



Quick Tip for Success:

The Challenge and the activities in this module are purposely a bit more flexible!

Take this opportunity to step up and make organizational decisions about your datasets that mimic the work experience. You've been empowered to make decisions about your data!

Module 8

Today's Agenda

Today's Agenda

By completing today's activities, you'll learn the following skills:

01

Use list comprehensions.

02

Use regular expressions.

03

Build an ETL pipeline.



**Make sure you've downloaded
any relevant class files!**

Transforming and Cleaning Data



Instructor Demonstration

Data Transformation and Cleaning

Questions?





Activity: Transform and Clean Online Orders

In this activity, you'll transform and clean a dataset to prepare it for upload into a database.

Suggested Time:
15 Minutes





Let's Review

List Comprehensions

List Comprehensions

A list comprehension includes three elements:

01

An expression

02

An element

03

An iterable object—like a list, dictionary, or tuple



Instructor Demonstration

List Comprehensions

Questions?





Activity: List Comprehensions

In this activity, you'll practice using list comprehensions.

Suggested Time:
15 Minutes





Let's Review



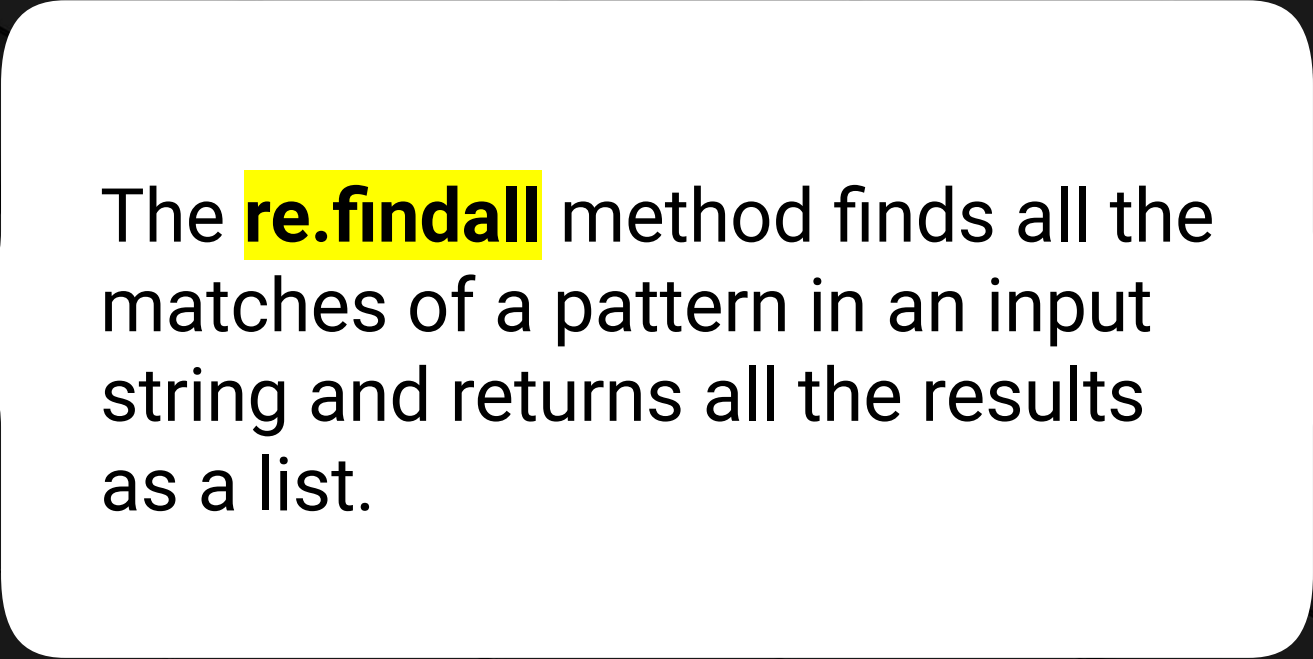
Group Activity: Transforming and Cleaning Grocery Orders

In this activity, you'll transform and clean grocery data and then merge that data with another dataset.

Suggested Time:
15 minutes



Basic Regex Pattern Matching



The **re.findall** method finds all the matches of a pattern in an input string and returns all the results as a list.



Instructor Demonstration

Basic Regex Pattern Matching

Questions?

