

Now it's time to put the Python skills you've been acquiring to use in three case studies! In Week 3, we will work through three case study examples of ways to apply Python to a research question, and then you'll get a chance to practice your coding skills with a homework associated with each case study.

In Week 3, you will:

- Learn how to translate DNA
- Learn how to process texts
- Learn how to classify items using the k-nearest neighbors method

Week 3 is divided into three case studies: DNA translation, language processing, and introduction to classification. For each case study, there are introductory videos that go over the basic concepts involved with Comprehension Checks after most videos. There is also a Homework for each case study that will allow you to practice the coding techniques introduced in the videos.

The Homeworks and some of the Comprehension Checks will require you to work through code. We encourage you to use Python to interactively test out your answers and further your learning.