Introduction to Python

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Session 2

Session 2 In-class Exercises

<u>Exercise One:</u>

Create three lists:

humanities = ["English", "History", "French", "Art History", "Philosophy"]
sciences = ["Biology", "Chemistry", "Neuroscience", "Physics", "Ecology"]
social_sciences = ["Political Science", "Sociology", "Anthropology", "Psychology"]

1. Using conditionals, write the code that prints "You are a philosopher" if the fifth element of humanities is philosophy (hint: remember indices from Monday!)

2. Now write a program that asks what department you are in, and based on the response, outputs one of the following messages (hint: remember the input() function from Monday!):

You are a humanist!
You are a scientist!
You are a social scientist!
You are probably doing something interesting!

<u>Exercise 2:</u>

store_shelf = ["apples", "bread", "cookies", "avocados", "eggs", "milk", "carrots"]

1. Write a for loop to print all the items in store_shelf starting with the letter "a"

2. Write a for loop to print all the items in store_shelf that are longer than 5 letters

Exercise 3:

Using your humanities and sciences lists from exercise 1 (copied below), write a for loop to compare the number of letters in each element of humanities with each word of sciences, printing the two words and the statement "These words have the same number of letters!" when there is a match for the number of letters

humanities = ["English", "History", "French", "Art History", "Philosophy"]
sciences = ["Biology", "Chemistry", "Neuroscience", "Physics", "Ecology"]