Introduction to Python

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Class 1

Class 1 Homework Exercises

1. Write the code to:

i. create a string and assign it to a variable

x = "test string"

ii. Print a slice of the first four letters of the string

print(x[0:4])

2. Write a program that asks what your favorite color is, and then outputs "Your favorite color is X."

Color = input("What is you favorite color? ")

Print("Your favorite color is", color)

3. Fill the table showing the values of the variables in this program after each statement is executed.

Command	Value of X	Value of Y	Value of swap
X = 1.0	*1.0*	*Name error*	*Name error*
Y = 3.0	*1.0*	*3.0*	*Name error*
swap = X	*1.0*	*3.0*	*1.0*
X = Y	*3.0*	*3.0*	*1.0*
Y = swap	*3.0*	*1.0*	*1.0*

4. If you assign a = 123, what happens if you try to get the second digit of a via a[1]?

Type error

5. What does the following program print?

atom_name = 'carbon'

print('atom_name[1:3] is:', atom_name[1:3])

atom_name[1:3] is: ar

6. Given the following string:

species_name = "Acacia buxifolia"

What would these expressions return?

i. species_name[2:8]

acia b

ii. species_name[11:] (without a value after the colon)

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iii. species_name[:4] (without a value before the colon)

Acac

iv. species_name[11:-3]

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v. species_name[-5:-3]

fo

What happens when you choose a stop value which is out of range? (i.e., try species_name[0:20] or species_name[:103])

Print full string: "Acacia buxifolia"

7. Given a list assigned to the variable buildings, as below, write the code to print how many letters there are in the second element of the list

Buildings = ["Jolley", "Eads", "Seigle", "Cupples"]

print(len(Buildings[1]))