

Introduction to Python (Spring 2024)

Claudia Carroll, TRIADS

Class 2 (Jan 29th, 2024)

Class 2 Homework Exercises

1. Write the code to:

- i. create a string and assign it to a variable

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

2. Write a program that asks what your favorite color is, and then outputs “Your favorite color is X.” Run your program from the command line.

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			
Y = 3.0			
swap = X			
X = Y			
Y = swap			

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

5. What does the following program print?

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

6. Given the following string:

```
species_name = "Acacia buxifolia"
```

What would these expressions return?

- i. species_name[2:8]
- ii. species_name[11:] (without a value after the colon)
- iii. species_name[:4] (without a value before the colon)
- iv. species_name[11:-3]
- v. species_name[-5:-3]

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

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"]
```