

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
- 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.”**

**3. Fill in 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"]
```