1. **PART 1 - TOOLS IN THE COURSE**

* **Any questions?**
* **Try the following things and make SURE you can do them/understand them:**
  + Open the first problem set from Canvas and try to run some code in one of the problem set problems. What do you have to do to complete the problem set?
  + Open the first reading assignment and click through some of the readings. Interact with some of the activities to make sure you can do that.
  + What does "Mark as Completed" in textbook do? Is it necessary for grading?
  + Where is the first DYU? Go look at it.
  + You suddenly remember you want to look up what the textbook says about errors. Where do you find it? Go find it.
  + You want to open up a textbook window for this course in a new tab in your web browser. Try to do this.
  + You want to try running some code.
  + You refresh a page in the textbook, but want to see the code you ran earlier in a code window. What do you do?
  + Check out our Piazza site. Search for posts about "questions"

**II. Exercise 1 - Reference diagram**

In a group, draw a reference diagram for this code on the board -- talk to one another about how you can make it accurate. Consider: what is happening in each line of code?

x = 4

y = 2

z = x + y

lp = [4, 5.0, 6, 8, 9.0]

sa = "hello everyone"

print(z + y)

print(len(lp))

b = len(lp)

q = sa.split('e')

nm = sa.split()

print(len(nm))

cats\_and\_dogs = len(q)

(see next page / other side for Exercise II)

**II. Exercise II (if time) -- Debugging**

What should you change to fix this code? There are at least 4 errors in it, but most of the errors could be fixed in different ways, depending upon what you want to happen! Make decisions about what you think *should* happen, and then decide how to fix the code. Try it out in an interactive window to test what works and what doesn't!

a = [4.0, 6.0, 8.0, 12]

print(a.split())

y = len(a) + 7

x = "hello"

print(x + y

print(len(x.split())