

Print only this page, answer problem #1 on it, and then submit it as a .pdf file by Thursday at 11:30pm on Gradescope. Leave a good amount of time for submitting on Gradescope.

When working on this quiz, recall the rules stated on the Academic Integrity statement that you signed. You can download the **q1helper** project folder (available for Friday, on the **Weekly Schedule** link) in which to write/test/debug your code. Submit your completed **q1solution.py** module online by Thursday, 11:30pm. I will post my solutions to EEE reachable via the **Solutions** link on Saturday morning (after Problem #1 is due).

1. (5 pts) Draw a picture illustrating how Python executes the following code. Standard pictures show each name above a square box that contains the tail of an arrow, whose head points to an object. An object is shown as an oval (or rounded-corner square) labelled by the type of the object, whose inside shows its value (which may contain more names, arrows/references: **lists** can include or omit index numbers). When you change an existing reference, lightly cross out the old arrow and then draw the new one appropriately. Draw the picture with **no crossing arrows** (practice on a whiteboard and move things around if necessary).

script module (execution starts here)

```
import m
x = m.y
x.append(m.x)
m.y[1] = x
m.x[0] = m.y[1]
x[1][2][1] = 'a'
del m.y
```

m module (imported by script)

```
x = [1,2]
y = [x[0],x[1]]
```

