

Work with your neighbor. (This will be graded for participation only.)

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1. What is a reference? If a variable `x` is a reference to a list (array), does `x` actually contain the list?

2. We said that the line of code

```
x = [1, 2, 3, 4, 5]
```

is executed in two steps. What are these steps?

Step 1:

Step 2:

3. Draw the data structure diagram (that is, the reference diagram) for the following:

```
[ [1,0, 0], [0,1,0], [0,0,1] ]
```

Discuss with your group. Make sure everyone can see the diagram and that you agree on the diagram!

4. Draw the diagrams for the following:

```
x, y = "ab", 12
```

```
z = [x, y]
```

5. Slide 24: Write the code that produces the two different diagrams.

6. Slide 27: Write the code that produces the diagram shown.

7. Slide 28: What is the diagram for z?