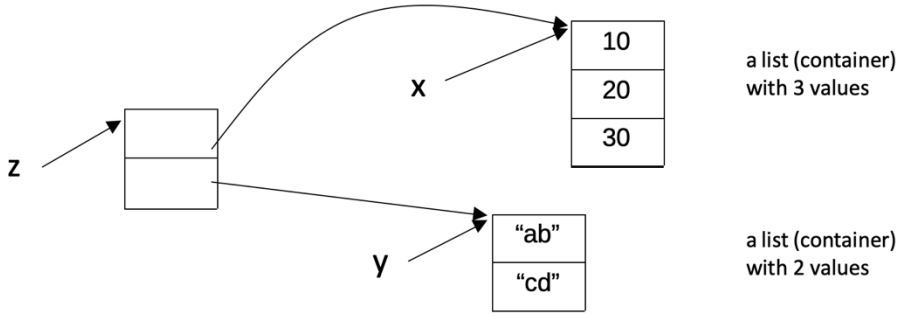
Work with your neighbor. (This will be graded for participation only.)

1. (Moved from ICA-10). Slide 28: What is the diagram for z?

ANS:

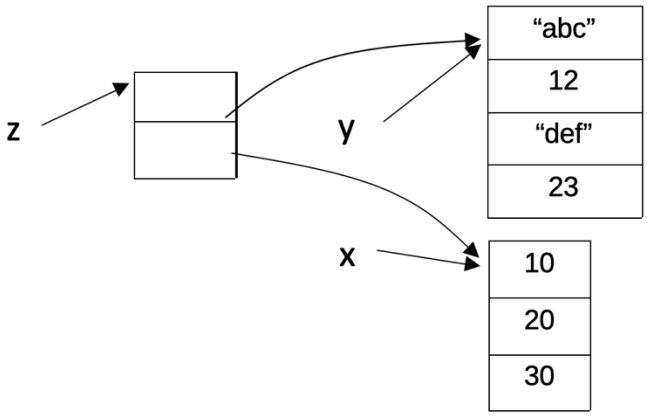
```
>>> x = [10, 20, 30]     # a list containing 3 values
>>> y = [“ab”, “cd”]     # a list containing 2 values
>>> z = [x, y]           # a list containing 2 values
```



2. Slide 32: What is the diagram for z?

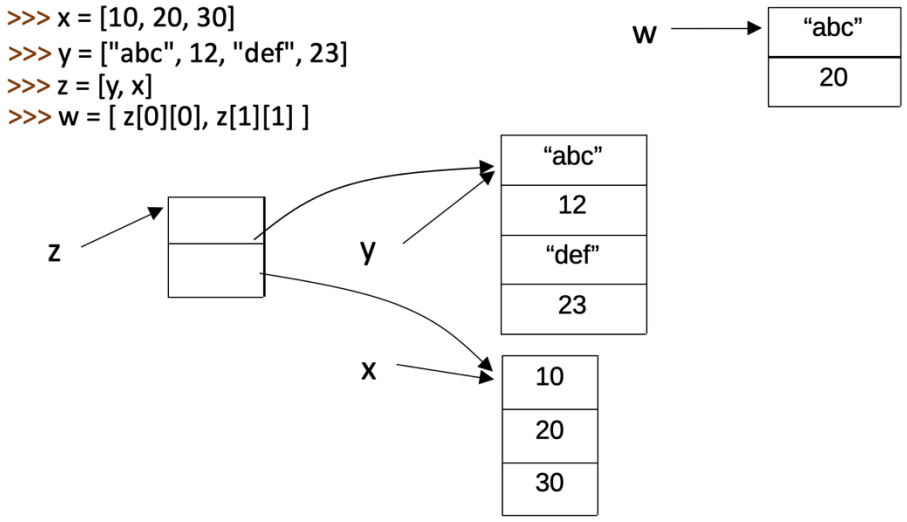
```
>>> x = [10, 20, 30]
>>> y = ["abc", 12, "def", 23]
>>> z = [y, x]
```

ANS:

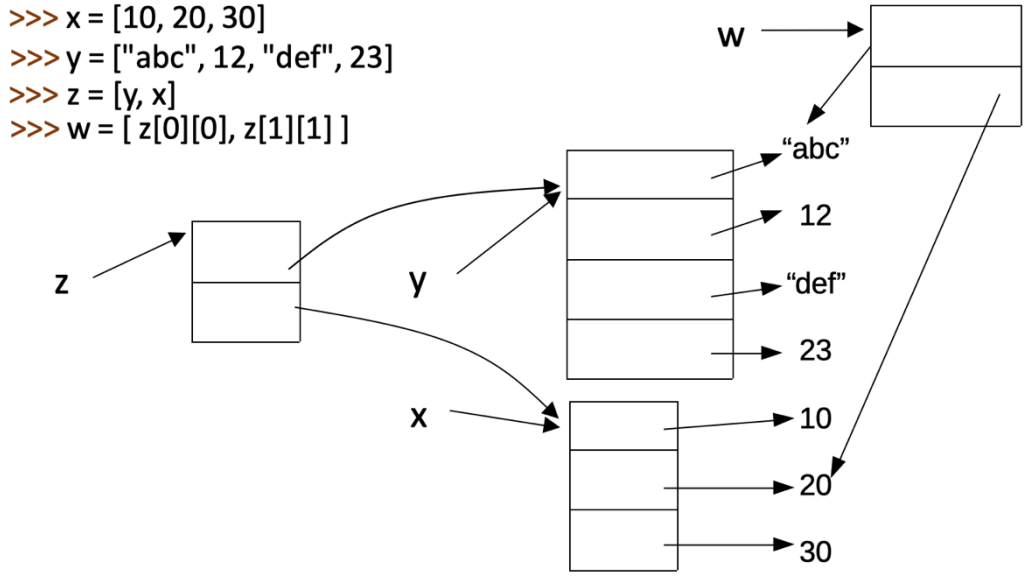


What is the diagram for w?

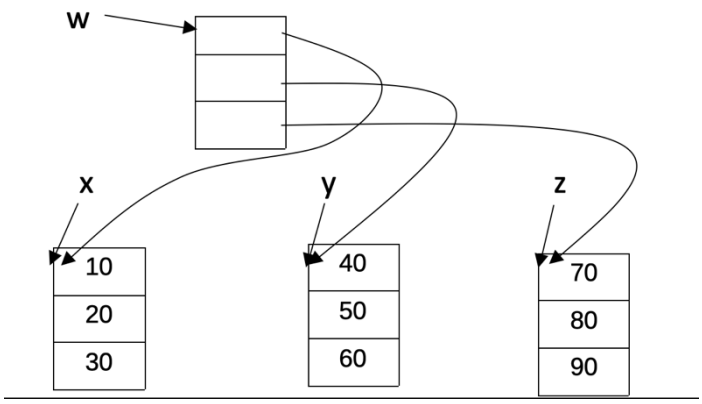
ANS:



OR, here is the full diagram without simplification



3. Slide 39: Write the code that will produce the diagram.



ANS:

```
x = [10,20,30]

y = [40,50,60]

z = [70, 80, 90]

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

4. Slide 42: What is the diagram for v?

   What is the diagram for x?

5. Slide 43: Write the function `myfun1()`.

   ANS:

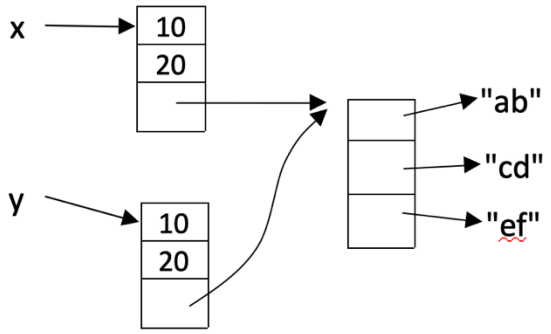
```
def myfun1():

    return ['ab','cd','ef']
```

6. Slide 44: Write the function `myfun2()`.

   ANS:

```
def myfun2():
    return [ 10, [20,30] ]
```

7. Slides 52-58. Answer True or False:



ANS:

x is y	False
x[2] is y[2]	True
x[2][0] is y[2][0]	True
x[2] == y[2]	True
x[0] == y[0]	True
x[0] == y[1]	False
x == y	True

(Note: Problem 8 was moved to ICA 12.)

8. Slide 67: What is the diagram for y?

```
x = [10, 20, 30]
y = [x, x]
```

Draw the resulting diagram:

How many aliases (references to the same data object) are there in this diagram?