```
List Copy questions:

Nov 18, 1C [Easy]

a = ["CS", 1010, "U"]

b = [a[:2], "S"]

c = b.copy()

c[0][1] = 2020
```

[['CS', 2020], 'S', 1010, 'U']

Nov 19 1A [Medium]

print(b + a[1:])

```
a = [1, [2, [3, 4]]]
b = a[1].copy()
c = b[1]
c[0], b[0] = b[0], c[0]
print(a)
print(b)
print(c)
[1,[2,[2,4]]
[3,[2,4]]
```

Apr 19 1C [Medium]

[2,4]

```
a = [1, 2]
a += [a]
b = a.copy()
a[2] = 0
print(a)
print(b)
```

[1,2,0] [1,2,[1,2,0]]

Apr 17 1B [Medium]

```
B. a = [1, 2]
b = [a, a]
c = a.copy()
c[0], a[1] = b[1], c[0]
print(a)
print(b)
print(c)
[1, 1]
[[1, 1], [1, 1]]
```

(go try Nov 16 1F now after these 4 questions)

```
KH's own question (comparing += and = ... +)
a = [1, [1,2]]
b = a.copy()
a[1] += [0]
print(a)
print(b)
Compare this to:
a = [1, [1,2]]
b = a.copy()
a[1] = [1,2,0]
print(a)
print(b)
Lovely lambdas
Nov 19 1E [Medium]
 def foo(x):
      def baz(y):
           return lambda z: (x, y)[z]
      return lambda x: baz(x)
 print(foo(-1)(0)(1))
0
Apr 19 1F [Medium]
  def bar(f, g):
     return lambda x: (lambda y: f(x))(g(x))
  print( bar(lambda x:x+1, lambda x:x*2)(5) )
Exceptions:
Nov 18, 1E [Easy]
def hammer_time(*mc):
     try:
         return mc[0] + mc[-1]
     except TypeError:
         return str(mc[0]) + str(mc[-1])
     except IndexError:
         return mc
     except Exception:
         return "Can't touch this"
print( hammer_time(1, "2") )
print( hammer_time( [3, 4, 5] ) )
print( hammer_time() )
12
[3, 4, 5, 3, 4, 5]
```

Sorting and Sorted

```
Nov 16 1A [Medium]
a = ['Pine', 'pen']
b = ['apple', 'PEN']
a[0] += b[0]
print(sorted(a+b, key=lambda x:x[::-1], reverse=True))
['pen', 'Pineapple', 'apple', 'PEN']
```

Dictionaries

```
Nov 17 1D: [Easy]
s = 'Lollapalooz|a'
d = {}
for i in range(len(s)):
    d[s[i%5]] = s[i]
print(d)
{'L': 'z', 'o': 'a', 'I': 'o', 'a': 'o'}

Nov 17 1F: [Medium]
d = {'c': 's', 10: 10, 's': 10}
s, k = '', 'c'
while k in d:
    s += str(d[k])
    k = d[k]
print(s)
```