Algorithm:

def arrayIntersect(a, b):

i = arrayIntersect

i = []

for j in a:

if j in b:

i.append(j)

print(i)

a = []

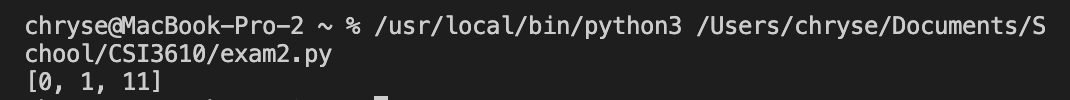
b = []

arrayIntersect(a,b)

Tests:

a = [0,1,11,5,8]

b = [7,1,3,11,0]



a = ['apples','orange', 'banana']

b = ['peach','banana','apples','grapes']



Correctness:

We assume that a is in array b. If that is the case, the program will first go through the for loop and if it finds something from a is also located in b, then it will go to the if statement where it will grab whatever is the same until it cannot find anymore similar variables.

Time Complexity:

The time complexity is O(n) because of the program being linear, the output will be the same number of elements as the arrays push out.