AP CSP Python with CodeX **Lists #2 Activity Guide**	Name:

Warm Up : Answer the questions, either individually or in a group.

What is a list?	● A list is an ordered collection of elements (items). ● A list is like a variable that can hold one or more values.
How do you define a list?	With square brackets: mylist = []
How do you access an item in a list?	Using its index: mylist[index]
What are some list methods?	Append, insert, pop

Code Tracing Activities : Write the result of each code tracing activity.

Code Tracing C	clist = [4, 6, 11, 6, 7, 37, 20, 5]
Code Tracing D	dlist = [1, 1, 7, 1, 3, 5, 2]
Code Tracing E	total = 20 elist = [2, 5, 6, 4, 3]

Wrap Up : Write the definitions in your own words. Then complete the code tracing activities.

These questions are review from Lists #1 and Lists #2. Students should use their own words for the definitions. The solutions below are from the presentation, so student answers should be different.

What is a list?	● A list is an ordered collection of elements (items). ● A list is like a variable that can hold one or more values.
What is an index?	The number used to reference an item in a list (the position in the list)
What are elements?	Individual values in a list; each referenced with an index
What is the list length?	How many elements the list contains
What are some list methods?	Append, insert, pop
What is the first index of any list?	0
What is the last index of any list?	len(list) - 1
Given the list, indicate the value of each element. myNumbers = [5, 4, 3, 2, 1]	myNumber[0]	5
	myNumber[1]	4
	myNumber[3]	2
	myNumber[4]	1
	myNumber[5]	Index out of range error

What will be displayed after the code segment is run?	```python
myList = [2, 4, 6]
myList.append(8)
myList.insert(1, 10)
myList.append(myList[0] + myList[3])
myList.pop(3)
```

What are the final elements of myList? [2, 10, 4, 8, 8]
What are the final indexes of the list? 0, 1, 2, 3, 4
What is the final length of the list? len(myList) = 5 |