Chapter 7; P5

Due

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DO EACH STEP IN ORDER. COPY & PASTE FROM IDLE OR VSCODE

1. A. Type this into your program: numbers = [200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000]

B. Repeat the list 5 times by using the \_\_\_\_repetition\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_operator\_\_\_\_\_\_\_.

C&P Answer:

numbers = [200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000] \* 5

[200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000, 200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000, 200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000, 200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000, 200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000]

C. Index your list. C&P Answers below each one.

* [-3]

numbers[-3]

12

* [5]

numbers[5]

4.5

* [11]

numbers[11]

23

D. Use the function that will return the length of your sequence. C&P Answer below

len(numbers))

50

E. Change elements in your list:

* Change 200 to 202 C&P numbers[0] = 202
* Change 28 to 29 C&P numbers[8] = 29
* Print your list C&P

[202, 23, 45, 900, 323, 4.5, 209, 12, 29, 1000, 200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000, 200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000, 200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000, 200, 23, 45, 900, 323, 4.5, 209, 12, 28, 1000]

2. You have two lists: numbers2 = [1,2,3,4,5] numbers3 = [6,7,8,9,10,11]

Concatenate the lists. C&P

numbers4 = numbers2 + numbers3

3. Slicing using your numbers list C&P each answer below individually

* [ : 3]

numbers4[:3]

[1, 2, 3]

* [2:8]

numbers4[2:8]

[3, 4, 5, 6, 7, 8]

* [ : -3]

numbers4[:-3]

[1, 2, 3, 4, 5, 6, 7, 8]

* [-7: ]

numbers4[-7:]

[5, 6, 7, 8, 9, 10, 11]

4. Using this list step = [1,2,3,4,5,6,7,8,9,10,11,12,13,14]

* Using slicing with step: print out only the odd numbers C&P

step[0::2]

* Using slicing with step: print out only the even numbers C&P

step[1::2]

* Using slicing with a step of 3 C&P

step[1::3]

* Using slicing and step print out every 5th number C&P

step[0::5]

5. Your list fruit = [apple, banana, melon]

A) append Method: add lemon to the end of the list C&P

fruit.append('lemon')

B) insert watermelon after apple C&P

fruit.insert(1, 'watermelon')

C) sort the list C&P

fruit.sort()

D) reverse the list C&P

fruit.reverse()

E) remove lemon from the list C&P

fruit.remove('lemon')

6. del statement : Your list salary = [1000, 500, 45000, 23500, 60245, 1800, 50000]

\* Perform all actions and then C&P as a block.

A) print list

B) del index 3

C) print list

D) del index -2

E) print list

F) del index 8

G) print list

print(salary)

del salary[3]

print(salary)

del salary[-2]

print(salary)

# this will give an error

del salary[8]

# prints out an error

print(salary)

7. Copy the original elements salary list in #6 and name the list raises (just a regular copy and paste at this point, not a list copy!) \*Perform all actions and the C&P as a block

A) perform min sort with the sentence: The lowest raise is

B) print

C) perform max sort with the sentence: The maximum raise is

D) print

raises = [1000, 500, 45000, 23500, 60245, 1800, 50000]

print('The lowest raise is', min(raises))

print('The maximum raise is', max(raises))

8. Using the list in #7 copy it to a new list called raises\_2020. C&P

raises\_2020 = raises

print(raises)

9. Follow all directions and copy and paste the answers as one block.

A) Create a tuple named school\_subjects and fill it with 5 elements.

B) Create a tuple named fav\_subjects and fill it with 1 element.

C) print both

D) concatenate the lists

E) print concatenated

school\_subjects = ('math', 'english', 'science', 'history', 'spanish')

fav\_subjects = ('gym',)

print(school\_subjects)

print(fav\_subjects)

my\_class\_subjects = school\_subjects + fav\_subjects

print(my\_class\_subjects)

10. Using E from above:

A) convert tuple to list

B) print with type

C)Convert the new list back to a tuple

D) print with type

my\_class\_subjects\_list = list(my\_class\_subjects)

print(type(my\_class\_subjects\_list))

my\_class\_subjects\_back\_to\_tuple = tuple(my\_class\_subjects\_list)

print(type(my\_class\_subjects\_back\_to\_tuple))