Using An Entire List Within A Function Practice Problems Solutions:

"""

0.initial setup:
a.create a variable and assign it a list of all integers

1.printing a list's elements using a for loop in a function:
a.create a function that will take a list as its input and prints that list's elements using a for loop
b.call the function you created in step 1.a. with the list you created in step 0.a. as its input.

2.generating lists using range():
a.use range() to generate a list that starts at 0 and ends at and includes 9 (range should only have 1 input.) Assign this range() to a variable
b.use range () to generate a list that starts at 4 and ends at and includes 7 (range should only have 2 inputs.) Assign this range() to a variable
c.use range to generate a list that starts at 5, increments up in steps of 5, and ends at and includes 20 (range should have 3 inputs.) Assign this range() to a variable.

3.passing a list made using a range into a function:
a.create a function that takes and returns 1 input
b.print a call of the function you created in step 3.a. with the range you made in step 2.a. as its input

4.iterating through a list using range() and a for loop:
a.create a function that uses a for loop and a range (as was shown in the lecture video) to print all of the elements from a list.
b.call the function you created in step 4.a. with the range you made in step 2.b. as its input.

5.modifying elements from a list using range:
a.Create a function that uses a for loop and a range() to iterate through and add 3 to each of the elements from a list. The function should print the modified list.
b.call the function you created in step 5.a. with the list you made in step 0.a. as its input.

6.passing multiple lists into a function:
a.Create a function that takes and prints 2 inputs.
b.Call the function you created in step 6.a. with the list you modified in step 5.b. and the range() you made in step 2.c.

7.Iterating through a list of lists using a function:
a.Create a list that contains 3 lists. Each of those lists should be composed of all strings.
b.Create a function that appends all of the strings from the list you made in step a into a new, single list. (This function should use 2 for loops.) This function should print the new list.
c.Call the function you made in step 7.b. using the list you created in step 7.a. as its input.

"""

```python
# 0.a.
inputList = [5, 4, 3, 2, 1]


# 1.a.
def one_input(a_list):
    for item in a_list:
        print(item)

# 1.b.
one_input(inputList)


# 2.a.
range1 = range(10)

# 2.b.
range2 = range(4, 8)

# 2.c.
range3 = range(5, 21, 5)


# 3.a.
def range_return(the_range):
    return the_range

# 3.b
print(range_return(range1))


# 4.a
def range_iterator(a_range):
    for element in range(0, len(a_range)):
        print(a_range[element])

# 4.b
range_iterator(range2)


# 5.a.
def range_modifier(modified):
    for items in range(0, len(modified)):
        modified[items] += 3  # could have also typed: modified[items] = modified[items] + 3
    print(modified)

# 5.b.
range_modifier(inputList)
```

```python
# 6.a.
def two_inputs(list1, list2):
    print(list1, list2)

# 6.b.
two_inputs(inputList, range3)


# 7.a.
all_strings = [["apple", "pear"], ["broccoli", "carrots", "corn"], ["pork", "beef"]]

# 7.b.
def concatenator(list_of_strings):
    new_list = []
    for index in range(0, len(list_of_strings)):
        for strings in list_of_strings[index]:
            new_list.append(strings)
    print(new_list)

# 7.c
concatenator(all_strings)
```