Problem Set 4	
SOCI19	
Fall 2023	

Name: _____

Instructor: Professor Hogan

1 Write the Output

Assume that you have already begun by running the following lines of code:

```
list1 = ['a', 'b', 'c']
list2 = ['d', 'e', 'f']
```

For each of the following, write the output that would be produced from running each of the following line(s) of code based on the variables defined above. If the code produces an error, simply write "Error".

```
Question 1. (2 points)
print(list1[len(list1) - 1])

Question 2. (2 points)
print(list1[len(list1)])

Question 3. (2 points)
list3 = list2 + list1
print(list3)

Question 4. (2 points)
added = list1[0] + list2[0]
print(added)
```

2 Tracing Loops

Questions 10-13 refer to the following code:

τ	20 20 20 20 20 20 20 20 20 20 20 20 20 2	
1	list1 = ['a', 'b', 'c']	
	list2 = ['d', 'e', 'f']	
3	# Nested Loop:	
4	for first in list1:	
5	for second in list2:	
	<pre>print(first, second)</pre>	
	# For Loop with Range:	
	for i in range(len(list1)):	
9	<pre>print(list1[i], list2[i])</pre>	
Qu	estion 5. (2 points) How many total times does the for loop on line 4 execute?	_
Qu	estion 6. (2 points) How many total times does the for loop on line 5 execute?	_
Qu	estion 7. (2 points) How many total times does the for loop on line 8 execute?	_
of	estion 8. (12 points) Write the printed output of the entire program, and indicate which lines printed output came from the nested loop in lines 4-6, and which came from the for loop with age in lines 8-9.	
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