

# More For Loops Practice Problems Solutions:

"""

1.Iterating through a string using range() and a for loop

a.create a string and assign it to a variable

b.use a for loop without a range() to iterate through and print the contents of the string from step 1.a.

c.use a for loop with a range() to iterate through and print the contents of the string from step 1.a.

2.Using , and end to print output of a for loop on the same line

a.create a variable and assign it a list of integers

b.use a for loop with , and end to print all the integers from the list you made as one integer (eg if your list was [1, 2, 5, 7], the output of the for loop should be 1257)

c.use a for loop with , and end to print all the integers from the list you made with "X" between them (eg if your list was [4, 3, 2, 1], the output of the for loop should be 4X3X2X1X)

3.Using a for loop to iterate through a dictionary

a.create a dictionary and assign it to a variable

b.use a for loop to iterate through the dictionary and print its keys and values with the following form:

value key (eg, if your dictionary is {"first": 1, "second": 2}, your output should be 1 "first" and on another line

2 "second")(since dictionaries don't have to print in order, your output with {"first": 1, "second": 2} as your

dictionary could have also been 2 "second" and on another line 1 "first")

4.zip()

a.create 2 lists of numbers and assign them to variables

b.use a for loop and zip() to iterate through both those lists, sum their values, and append those values to a new list (eg, if one of your lists is [1, 2] and your other list is [5, 9], then the for loop would iterate through them, add 1 to 5 resulting in 6 and add 2 to 9 resulting in 11)

c.print the new list (the resulting list from the example given in 4.b. would be [6, 11])

5.for/else

a.create a tuple with 5 elements that are all strings and assign it to a variable

b.create a for/else loop that prints the first 4 elements of the tuple from step 5.a. with its for loop portion and the fifth element of the tuple from step 5.a. with the else statement

c.create a for/else loop that prints the first 3 elements of the tuple from step 5 then ends prematurely before the else statement is triggered using a break statement

"""

# 1.a.

str1 = "Borneo"

# 1.b.

for char in str1:

print(char)

# 1.c

```
for char in range(len(str1)):
    print(str1[char])
```

```
# 2.a
intList = [0, 4, 8, 90]
```

```
# 2.b.
for ints in intList:
    print(ints, end="")
```

```
# 2.c.
for item in intList:
    print(item, end="X")
```

```
# 3.a.
dictionary = {"Mercury": 1, "Earth": 3, "Mars": 4}
```

```
# 3.b.
for key in dictionary:
    print(str(dictionary[key]) + " " + key)
```

```
# 4.a.
list1 = [10, 488, 2.1, 29]
list2 = [32, 30, 1, 0]
```

```
# 4.b.
emp = []
for num1, num2 in zip(list1, list2):
    emp.append(num1 + num2)
```

```
# 4.c.
print(emp)
```

```
# 5.a.
tup = ("scorpio", "aquarius", "pisces", "libra", "sagittarius")
```

```
# 5.b.
for index in range(len(tup) - 1):
    print(tup[index])
else:
    print(tup[4])
```

```
# 5.c.
for index in range(len(tup)):
    if index < 3:
        print(tup[index])
```

```
else:  
    break  
else:  
    print("This should not be printed")
```