



More For Loops

Lesson Outcomes:

1. Know how to iterate through a string using range() and a for loop
2. Know how to use “,” in a print statement in a for loop to make numbers or characters print on the same line
3. Know how to use a for loop to iterate through a dictionary
4. Know how to use the zip() function to iterate through two or more lists at once and compare their values
5. Know how to use for/else loops

Iterating Through A String Using range() And A For Loop

```
ex_str = "example"
```

```
for char in ex_str:  
    print(char)
```

```
ex_str = "example"
```

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

.....

Output if either of the blocks
of code to the left is run:

e
x
a
m
p
l
e

.....

Using “,” In A Print Statement In A For Loop

```
ex_str = "example"
```

```
for char in ex_str:  
    print(char, end=" ")
```

"""

Output of code to the left:

e x a m p l e

"""

```
ex_str = "example"
```

```
for char in ex_str:  
    print(char, end="Z")
```

"""

Output of code to the left:

eZxZaZmZpZlZeZ

"""

Using A For Loop to Iterate Through A Dictionary

```
ex_dict = {"first": 1, "second": 2, "third": 3}
```

```
for key in ex_dict:  
    print(key + " " + str(ex_dict[key]))
```

```
"""
```

```
first 1
```

```
second 2
```

```
third 3
```

```
"""
```

zip()

```
list1 = [4, 0, 11, 3]
```

```
list2 = [1, 1, 9, 18]
```

```
for items1, items2 in zip(list1, list2):
```

```
    if items1 > items2:
```

```
        print(items1)
```

```
    elif items1 < items2:
```

```
        print(items2)
```

////

4

1

11

18

////

for/else

```
exTup = (3, 5, 7)
```

```
for item in exTup:  
    print(item)  
else:  
    print(9)
```

```
.....
```

```
3
```

```
5
```

```
7
```

```
9
```

```
.....
```

```
exTup = (3, 5, 7)
```

```
for item in exTup:  
    if item < 7:  
        print(item)  
    else:  
        break  
else:  
    print(9)
```

```
.....
```

```
3
```

```
5
```

```
.....
```

Recap

1. Know how to iterate through a string using `range()` and a for loop
2. Know how to use “,” in a print statement in a for loop to make numbers or characters print on the same line
3. Know how to use a for loop to iterate through a dictionary
4. Know how to use the `zip()` function to iterate through two or more lists at once and compare their values
5. Know how to use for/else loops



What's next?