

**Welcome**

**Your Lecturer for this session**



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# Objectives

- Learn how to use the for loop to repeat a block of code a specified amount of times.

# for Loops

- ★ For loops are used when we need code to run a specified amount of times.
- ★ Think of it making the task of creating ten print statements much easier.

```
2 print("Again")
3 print("Again")
4 print("Again")
5 print("Again")
6 print("Again")
7 print("Again")
8 print("Again")
9 print("Again")
```

# for Loop Syntax

```
13  for item in iterable:  
14      # Do something :)
```

- ★ **Iterable\_object**: a list of numbers, a string of characters, a range etc.
- ★ **Item**: temporary variable used inside the for loop to reference the current position of our iterator.

# for Loop Example

```
greetings = "Hello"  
for character in greetings:  
    print(character)
```

- ★ The above loop will iterate over the string "greetings".
- ★ This entails that the temporary variable **character** will continuously be updated with each letter found in "coffee".
- ★ Which results in the following output: (Queue Code Editor)

# for Loops and Range

- ★ With for loops we can also get a range of numbers from a starting value to an ending value.

```
# From 1 up to, but EXCLUDING 5  
for number in range(1, 5):  
    print(number)
```

The output here will be all values from 1 to 4.

# Range

- ★ Range allows us to run a block of code a specified amount of times.

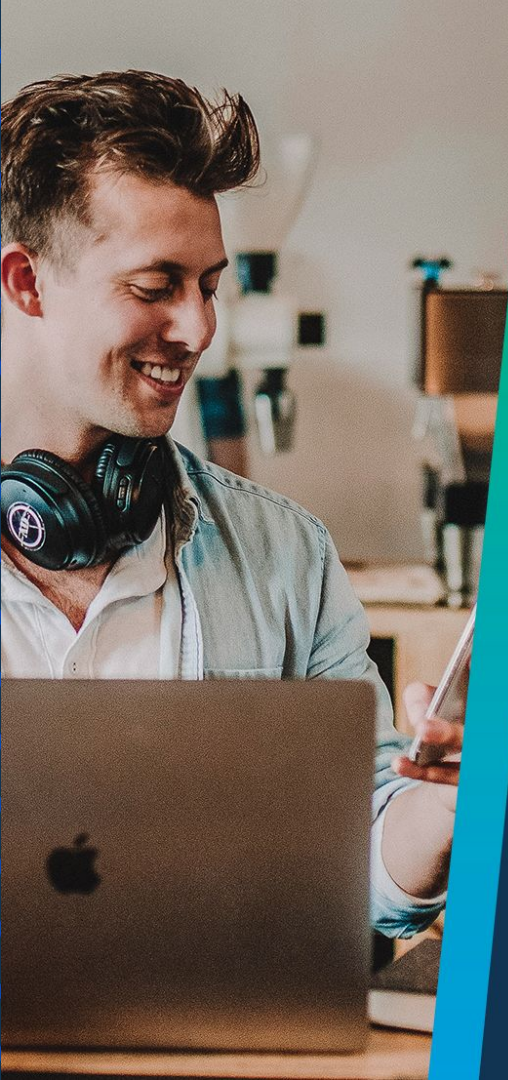
Range	Description	Additional Info
<code>range(10)</code>	Outputs integers from 0 through 9	Range will always start from 0
<code>range(1, 10)</code>	Outputs integers from 1 to 9	Parameters(start, end)
<code>range(1, 10, 2)</code>	Outputs odd numbers from 1 to 10	Third available parameter is "step" (how many to skip)
<code>range(10, 0, -1)</code>	Outputs integers from 10 to 1	Negative counter that skips backwards

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# Q & A Section

Please use this time to ask any questions relating to the topic, should you have any.





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# Thank You for Joining Us