Module 1 Cheat Sheet: Python Basics

Package/Method	Description	Code Example
Comments	Comments are lines of text that are ignored by the Python interpreter when executing the code<./td>	1. 1 > 1. # This is a comment
Comments	Comments are lines of text that are ignored by the rython interpreter when executing the codes of	Copied!
		Syntax:
Concatenation	Combines (concatenates) strings.	1. 1
		1. concatenated_string = string1 + string2
		Copied! Example:
		1. 1
		<pre>1. result = "Hello" + " John"</pre>
		Copied!
		Example:
		1. 1 2. 2 3. 3
		4. 4 5. 5
		6. 6 7. 7
		8. 8 9. 9
Data Types	- Integer - Float - Boolean - String	10. 10 1. x=7
		2. # Integer Value 3. y=12.4
		<pre>4. # Float Value 5. is_valid = True</pre>
		<pre>6. # Boolean Value 7. is_valid = False</pre>
		8. # Boolean Value 9. F_Name = "John"
		10. # String Value Copied!
Indexing	Accesses character at a specific index.	Example:
		1. 1 2. 2
		1. my_string="Hello"
		<pre>2. char = my_string[0]</pre>
		Copied! Syntax:
len()	Returns the length of a string.	1. 1
		1. len(string_name)
		Copied!
		Example:
		1. 1 2. 2
		<pre>1. my_string="Hello" 2. length = len(my_string)</pre>
		Copied!
lower()	Converts string to lowercase.	Example:
		1. 1 2. 2
		<pre>1. my_string="Hello" 2. uppercase_text = my_string.lower()</pre>
		Copied!
print()	Prints the message or variable inside `()`.	Example:
		1. 1 2. 2
		1. print("Hello, world")
		2. print(a+b) Copied!
		Example:
Python Operators	- Addition (+): Adds two values together Subtraction (-): Subtracts one value from another Multiplication (*): Multiplies two values Division (/): Divides one value by another, returns a float Floor Division (//): Divides one value by another, returns the quotient as an integer Modulo (%): Returns the remainder after division.	1. 1 2. 2
		3. 3 4. 4
		5. 5 6. 6
		7. 7 1. x = 9 y = 4
		<pre>1. x = 9 y = 4 2. result_add= x + y # Addition 3. result_sub= x - y # Subtraction</pre>
		 result_mul= x * y # Multiplication result div= x / y # Division
		<pre>6. result_fdiv= x // y # Floor Division 7. result_mod= x % y # Modulo</pre>
		Copied!

replace() Replaces substrings.

Slicing Extracts a portion of the string.

split() Splits string into a list based on a delimiter.

strip() Removes leading/trailing whitespace.

upper() Converts string to uppercase.

Variable Assignment Assigns a value to a variable.



@ IBM Corporation. All rights reserved.

```
Example:
 1. my_string="Hello"
2. new_text = my_string.replace("Hello", "Hi")
Copied!
Syntax:
  1. 1
 1. substring = string_name[start:end]
Copied!
Example:
 1. 1
  1. my_string="Hello" substring = my_string[0:5]
Copied!
Example:
 1. my_string="Hello"
2. split_text = my_string.split(",")
Copied!
Example:
 1. my_string="Hello"
2. trimmed = my_string.strip()
Copied!
Example:
 1. my_string="Hello"
2. uppercase_text = my_string.upper()
Copied!
Syntax:
  1. 1
 1. variable_name = value
Copied!
```

1. name="John" # assigning John to variable name 2. x = 5 # assigning 5 to variable x

Example:

1. 1 2. 2

Copied!