## **Module 1 Cheat Sheet: Python Basics**

Comments are lines of text that are ignored by the Python interpreter when exceeding the code-club**  Comments are lines of text that are ignored by the Python interpreter when exceeding the code-club**  Copedit Synax:  1. 1. 1. 1. concatenated_string = string3   string3   string3    Fixample:  1. 1. 1. results = "rielle" = "John" (yeb)  Copedit String = String	Package/Method	Description	Code Example
Concidenation	Comments		
1. 1   1. concatenated string = string1 = string2   Concent		executing the code<./td>	
Concatenation   Combines (concatenates) strings.			•
Concentration   Combines (concentrates) strings.   Example:			1. concatenated_string = string1 + string2
1. 1	Concatenation	Combines (concatenates) strings.	
1. result = "#e110" + " John" c/tgo			
Example:			
Data Types			
Data Types			1. 1
Data Types			3. 3
Data Types			5. 5
Data Types			8. 8
1	Data Types	- Integer - Float - Boolean - String	
A. # Float Value   S. faville   True   G. # Boolean Value   B. # Boolean Value   G. # Boole	Data Types	indge. Their Booten string	2. # Integer Value
Indexing   Accesses character at a specific index.   Figure   Fi			4. # Float Value
Reference   Refe			6. # Boolean Value
Copied    Example:			8. # Boolean Value
Example:   1. 1     2. 2     1. my_stringe"Hello"     2. char = my_string[0]     Copied!     Syntax:   1. 1     1. len(string_name)     Copied!     Example:   Example:   1. 1     1. len(string_name)     Copied!     Example:   2. 2     1. my_stringe"Hello"     2. 2     1. my_stringe"Hello"     2. 2     1. my_stringe"Hello"     2. 1     2. 2     1. my_stringe"Hello"     2. length = len(my_string)     Copied!     Example:   1. 1     2. 2     1. my_stringe"Hello"     2. length = len(my_string)     Copied!     Example:   1. 1     2. 2     Division     Copied!     Example:   1. 1     2. 2     1. print("Hello, world")     2. print(a+b)     Copied!     Example:   Copied!     Copied!			10. # String Value
Indexing   Accesses character at a specific index.			
1. my_string="hello"   Copied!	Indexing	Accesses character at a specific index.	
Syntax:   1. 1     1. len(string_name)     Copied		Accesses character at a specific macx.	
1. 1   1. len(string_name)			
len()  Returns the length of a string.  Example:  1. 1 2. 2 1. my_string="Hello" 2. length = len(my_string)  Copied!  Example:  Copied!  Example:  1. 1 2. 2 1. my_string="Hello" 2. length = len(my_string)  Copied!  Example:  1. 1 2. 2 2. 2 2. 2 2. 2 2. 2 3. my_string="Hello" 2. uppercase_text = my_string.lower()  Copied!  Example:  print()  Prints the message or variable inside '()'.  Python Operators  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.  1. 1 2. 2 2. 2 3. 3 3. 3			
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1. 1   2. 2   1. my_string="Hello"   2. length = len(my_string)			Copied!
2. 2   1. my_string="Hello"   2. length = len(my_string)	len()	Returns the length of a string.	Example:
2. length = len(my_string)  Copied! Example:  1. 1 2. 2  lower()  Converts string to lowercase.  1. my_string="Hello" 2. uppercase_text = my_string.lower()  Copied! Example:  Copied! Example:  1. 1 2. 2  print()  Prints the message or variable inside `()`.  1. print("Hello, world") 2. print(a+b)  Copied!  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.  2. length = len(my_string)  Copied!  Example:  Example:  1. 1 2. 2 2 1. 1 2. 2 3. 3			
Example:   1. 1     2. 2     1. my_string="Hello"     2. uppercase_text = my_string.lower()     Copied!     Example:   Example:   1. 1     2. 2     Copied!     Example:   1. 1     2. 2     Prints the message or variable inside `()`.     Prints the message or variable inside `()`.     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.     1. 1     2. 2     Copied!     Example:     Example:     2. 2     3. 3     3. 3			
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- Division (/): Divides one value by another, returns a float.		- Multiplication (*): Multiplies two values.	
		- Division (/): Divides one value by another, returns a float.	3. 3

```
integer.
                                                                                                                                 5.5
                                                                                                                                 6. 6
                         - Modulo (%): Returns the remainder after division.
                                                                                                                                1. x = 9 y = 4
2. result_add= x + y # Addition
3. result_sub= x - y # Subtraction
4. result_mul= x * y # Multiplication
5. result_div= x / y # Division
6. result_fdiv= x // y # Floor Division
7. result_mod= x % y # Modulo
                                                                                                                             Copied!
                                                                                                                             Example:
                         Replaces substrings.
replace()
                                                                                                                                1. my_string="Hello"
2. new_text = my_string.replace("Hello", "Hi")
                                                                                                                             Copied!
                                                                                                                             Syntax:
                                                                                                                                1. 1
                                                                                                                                1. substring = string_name[start:end]
                                                                                                                             Copied!
                         Extracts a portion of the string.
Slicing
                                                                                                                             Example:
                                                                                                                                1. 1
                                                                                                                                 1. my_string="Hello" substring = my_string[0:5]
                                                                                                                             Copied!
                                                                                                                             Example:
split()
                         Splits string into a list based on a delimiter.
                                                                                                                                1. my_string="Hello"
2. split_text = my_string.split(",")
                                                                                                                             Copied!
                                                                                                                             Example:
                                                                                                                                 1. 1
                         Removes leading/trailing whitespace.
strip()
                                                                                                                                1. my_string="Hello"
2. trimmed = my_string.strip()
                                                                                                                             Copied!
                                                                                                                             Example:
                                                                                                                                1. 1
2. 2
upper()
                         Converts string to uppercase.
                                                                                                                                1. my_string="Hello"
2. uppercase_text = my_string.upper()
                                                                                                                             Copied!
                                                                                                                             Syntax:
                                                                                                                                1. 1
                                                                                                                                1. variable_name = value
                                                                                                                             Copied!
Variable
                         Assigns a value to a variable.
                                                                                                                             Example:
Assignment
                                                                                                                                 1. 1
2. 2

    name="John" # assigning John to variable name

                                                                                                                                 2. x = 5 \# assigning 5 to variable x
                                                                                                                             Copied!
```

