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 Copied!
Concatenation	Combines (concatenates) strings.	Syntax: 1. 1 1. concatenated_string = string1 + string2 Copied! Example: 1. 1 1. result = "Hello" + " John"</td> Copied!
Data Types	- Integer - Float - Boolean - String	Example: 1. 1 2. 2 3. 3 4. 4 5. 5 6. 6 7. 7 8. 8 9. 9 10. 10 1. x=7 2. # Integer Value 3. y=12.4 4. # Float Value 5. is_valid = True 6. # Boolean Value 7. is_valid = False 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" 2. char = my_string[0] Copied!
len()	Returns the length of a string.	Syntax: 1. 1 1. len(string_name) Copied! Example: 1. 1 2. 2 1. my_string="Hello" 2. length = len(my_string) Copied!
lower()	Converts string to lowercase.	Example: 1. 1 2. 2 1. my_string="Hello" 2. uppercase_text = my_string.lower() Copied!
print()	Prints the message or variable inside `()`.	Example: 1. 1 2. 2 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.	Example: 1. 1 2. 2 3. 3

	- Floor Division (//): Divides one value by another, returns the quotient as an integer. - Modulo (%): Returns the remainder after division.	4. 4 5. 5 6. 6 7. 7 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</td> Copied! Example: 1. 1 2. 2 1. my_string="Hello" 2. new_text = my_string.replace("Hello", "Hi") Copied!
replace()	Replaces substrings.	
Slicing	Extracts a portion of the string.	Syntax: 1. 1 1. substring = string_name[start:end] Copied! Example: 1. 1 1. my_string="Hello" substring = my_string[0:5] Copied!
split()	Splits string into a list based on a delimiter.	Example: 1. 1 2. 2 1. my_string="Hello" 2. split_text = my_string.split(",") Copied!
strip()	Removes leading/trailing whitespace.	Example: 1. 1 2. 2 1. my_string="Hello" 2. trimmed = my_string.strip() Copied!
upper()	Converts string to uppercase.	Example: 1. 1 2. 2 1. my_string="Hello" 2. uppercase_text = my_string.upper() Copied!
Variable Assignment	Assigns a value to a variable.	Syntax: 1. 1 1. variable_name = value Copied! Example: 1. 1 2. 2 1. name="John" # assigning John to variable name 2. x = 5 # assigning 5 to variable x Copied!

Skills Network