

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>	<pre>1. 1 1. # This is a comment</pre> <div>Copied!</div> <p>Syntax:</p> <pre>1. 1 1. concatenated_string = string1 + string2</pre> <div>Copied!</div>
Concatenation	Combines (concatenates) strings.	<p>Example:</p> <pre>1. 1 1. result = "Hello" + " John"&lt;/td&gt;</pre> <div>Copied!</div> <p>Example:</p> <pre>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</pre> <div>Copied!</div> <p>Example:</p> <pre>1. 1 2. 2 1. my_string="Hello" 2. char = my_string[0]</pre> <div>Copied!</div> <p>Syntax:</p> <pre>1. 1 1. len(string_name)</pre> <div>Copied!</div>
Data Types	- Integer - Float - Boolean - String	
Indexing	Accesses character at a specific index.	
len()	Returns the length of a string.	<p>Example:</p> <pre>1. 1 2. 2 1. my_string="Hello" 2. length = len(my_string)</pre> <div>Copied!</div> <p>Example:</p> <pre>1. 1 2. 2 1. my_string="Hello" 2. uppercase_text = my_string.lower()</pre> <div>Copied!</div>
lower()	Converts string to lowercase.	<p>Example:</p> <pre>1. 1 2. 2 1. my_string="Hello" 2. uppercase_text = my_string.lower()</pre> <div>Copied!</div>
print()	Prints the message or variable inside `()``.	<p>Example:</p> <pre>1. 1 2. 2 1. print("Hello, world") 2. print(a+b)</pre>

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



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