

PYTHON QUICK REFERENCE

DECODED

Use this quick reference to look up key bits of Python syntax.

Variables

A named place to store a value that can change. A variable can be used where you would normally use a value, and the value can be replaced with anything you want, as many times as you want..

<code>num = 1</code>	Assign a number to a variable
<code>wrd = "bee"</code>	Assign a string to a variable
<code>num = num + 1</code>	Overwrite a variable
<code>num += 1</code>	Increment a variable
<code>type(num)</code>	Check the type of variable or value
<code>num = str(num)</code>	Convert a value in a variable to a string and store the result

IF statements

Choose between multiple options based on logic. Each option has a condition, and the code below it is only run if the condition evaluates to True. The first True condition exits the statement, and no other code is run.

<code>if var == 0:</code> <code>print("Zero")</code>	The first condition always starts with "if"
<code>elif var < 0:</code> <code>print("Negative")</code>	Other conditions (0 or more) use "elif"
<code>else:</code> <code>print("Positive")</code>	"else" catches all other possibilities

FOR loops

A FOR loop repeats the same code several times. The loop keeps running until it has gone through every item in a collection, or until it has reached the end of a range.

<code>for thing in collection:</code> <code>print(thing)</code>	Loop once for each item in a container,
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<code>for thing in range(0, 10):</code> <code>print(thing)</code>	Loop once for each number from 0 to 10
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Functions

A function is a named, repeatable block of code.

<code>def square(num):</code>	Define a function with arguments
<code>return num ** 2</code>	Return a value

<code>square(13)</code>	Call a function by name.
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Lists

A list is an indexed data structure that stores values in order.

<code>my_list = ['a', 'b', 'c']</code>	Create a list of three values
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<code>my_list[0] = 'd'</code>	Access and modify a value by index
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<code>my_list.append('e')</code>	Add a value to the list
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