ADDITIONAL READING

Python-Java Cheat Sheet

Introduction

WELCOME TO THE PYTHON-JAVA CHEAT SHEET!

Programming or not, learning a new language can be daunting. Fortunately, when moving from one programming language to another, the concepts and logic themselves usually stay the same -- it's just the syntax that changes. Below is a cheat sheet that takes the Python concepts you're comfortable with and translates them to the Java equivalent. This list is not exhaustive, so we encourage you to start your own and add new concepts and translations as you come across them. You'll be a Java Developer in no time!



Remember that with our courses, you're not alone! You can contact your mentor to get support on any aspect of your course.

The best way to get help is to login to <u>www.hyperiondev.com/portal</u> to start a chat with your mentor. You can also schedule a call or get support via email.

Your mentor is happy to offer you support that is tailored to your individual career or education needs. Do not hesitate to ask a question or for additional support!

PYTHON-JAVA CHEAT SHEET

Name/ Concept	Python	Java
Print	<pre>print("Hello, world!")</pre>	<pre>System.out.println("Hello, world!");</pre>
Getting user input (string)	<pre>user_str = input("Enter a string: ")</pre>	<pre>System.out.print("Enter a string: "); Scanner s = new Scanner(System.in); String user_str = s.nextLine();</pre>
Getting user input (integer)	<pre>user_int = int(input("Enter an int: "))</pre>	<pre>System.out.print("Enter an int: "); Scanner s = new Scanner(System.in); int user_int = s.nextInt();</pre>
Getting user input (float)	<pre>user_float = float(input("Enter a float: "))</pre>	<pre>System.out.print("Enter a double: "); Scanner s = new Scanner(System.in); double user_double = s.nextDouble();</pre>
If-elif-else statement	<pre>if some_condition:</pre>	<pre>if (someCondition) { doSomething(); } else if (someOtherCondition) { doSomethingElse(); } else { doNothing(); }</pre>
For loop	<pre>for i in range(10): do_something()</pre>	<pre>for (int i = 0; i < 10; i++){ doSomething(); }</pre>
While loop	<pre>while condition: do_something()</pre>	<pre>while (condition) { doSomething(); }</pre>
Define a function	<pre>def my_function(x, y): return x + y</pre>	<pre>public static int myFunction(int x, int y){ return x + y; }</pre>
AND	(x and y)	(x && y)
OR	(x or y)	(x y)
NOT	(not x)	(!x)

Cast to integer	int("10")	<pre>Integer.parseInt("10");</pre>
Cast to string	str(10)	"" + 10;
Cast to float	float(10)	(float) 10;
List	<pre># Length irrelevant string_array = []</pre>	<pre>// Known length String [] stringArray = new String[2]; // Unknown length ArrayList<string> stringArrayList = new ArrayList<string>();</string></string></pre>
Dictionary (int key, string value)	<pre>greeting_dictionary = {}</pre>	<pre>Hashtable<integer, string=""> greetingDictionary = new Hashtable<integer, string="">();</integer,></integer,></pre>
String building	<pre>word1 = "Hello" word2 = "World" greeting1 = f"{word1}, {word2}!" greeting2 = "{}, {}!".format(word1, word2) greeting3 = word1 + ", " + word2 + "!"</pre>	<pre>String word1 = "Hello"; String word2 = "world"; String greeting = word1 + ", " + word2 + "!";</pre>