

# Python Programming

An introduction to Python Programming





Amin



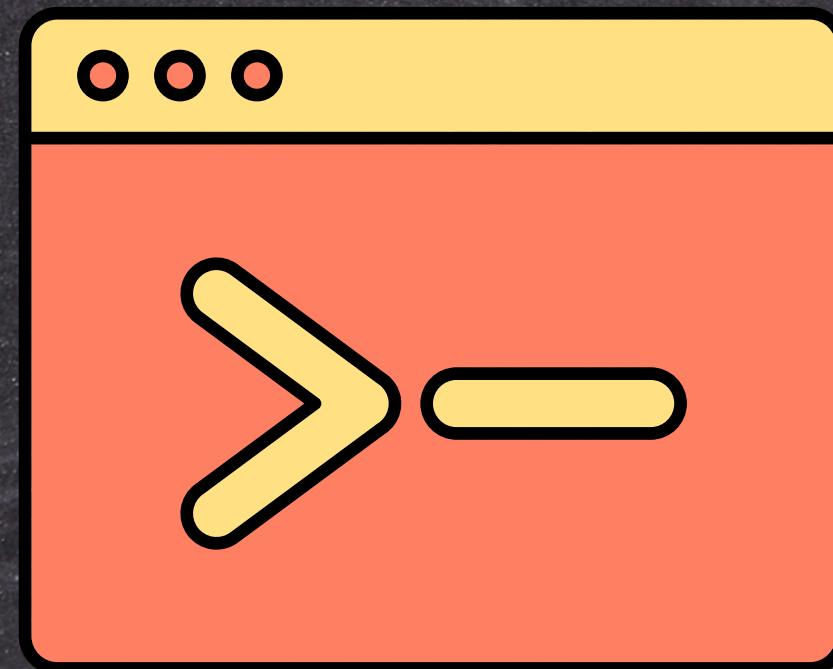
Ali





# Terminaaaaal

"Windows Terminal is like a Swiss Army knife for developers - it's got all the tools you need in one sleek package, and it's always ready to help you slice through your coding challenges!"

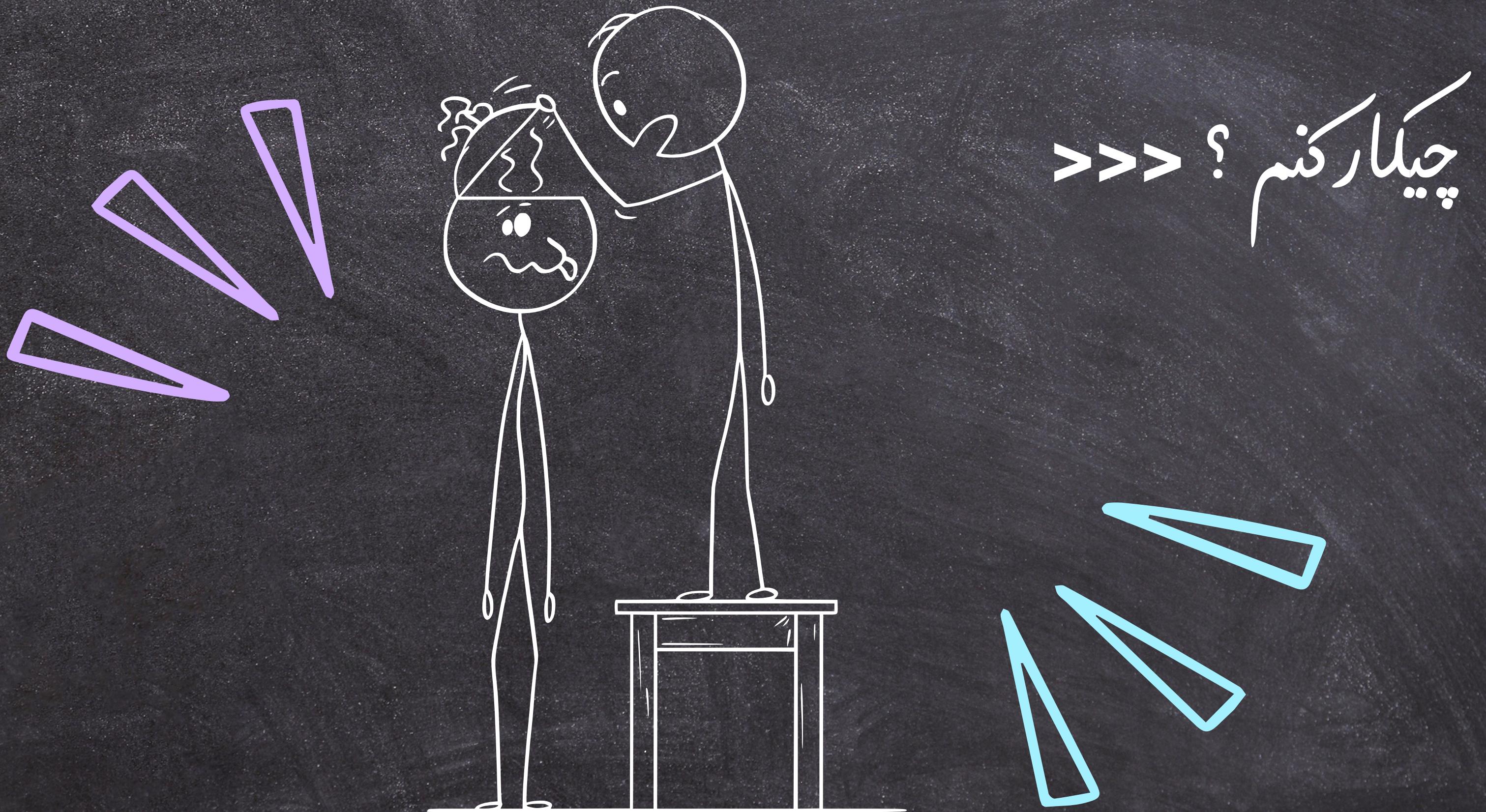




Let's have FUN !

FUN











# Variables

Be a variable in life - adapt to new situations, embrace change, and always be ready to take on new challenges.





# Reserved Words



False	class	return	is	finally	None	in	as	raise
if	for	lambda	continue	True	def	except	elif	import
from	while	nonlocal	and	del	global	break	try	pass
not	with	or	yield	assert	else			

ساخت پizza





معدلت خنده؟





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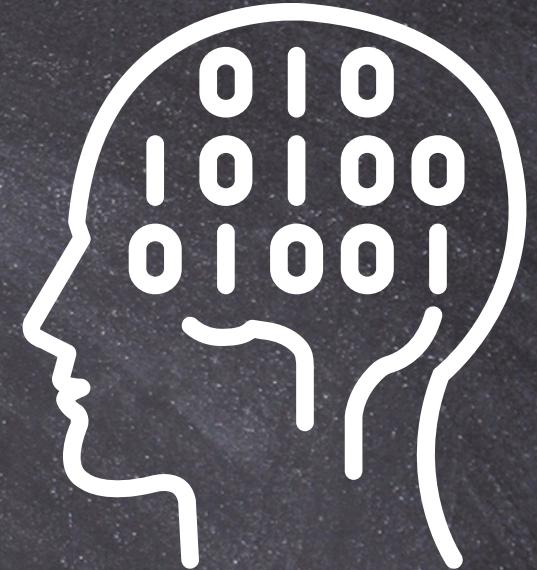
جن در صد از سال کن ند شته؟

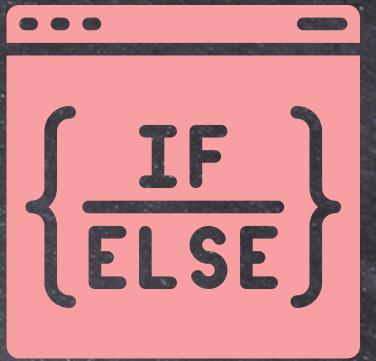


# Logical Operators

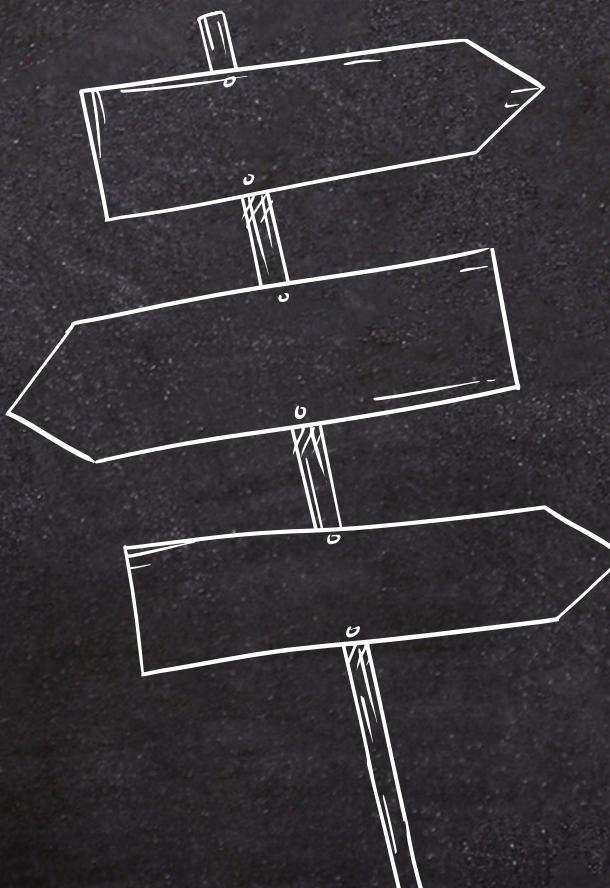


At the end, we Must make a judgment...





# Conditional Statements



What plan in what conditions..?



# Time flies

But some times are different!





vs.



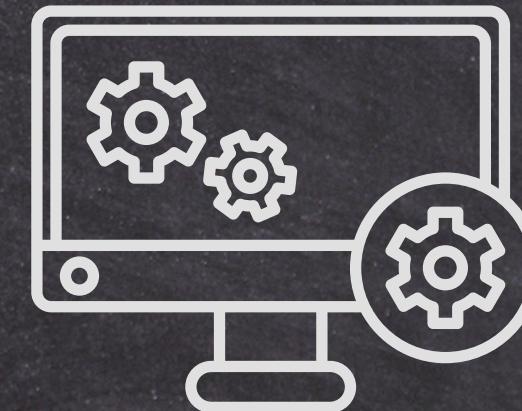


# Guess the number!

Who is smarter; you or your computer?



VS





# Then go out...





# Whom to watch?





# Homeworks!

1

نوبت کامپیوuterها!

2

فرار از جمل مرکب!



"To know, and know to know..."

Quote by Maestro street.



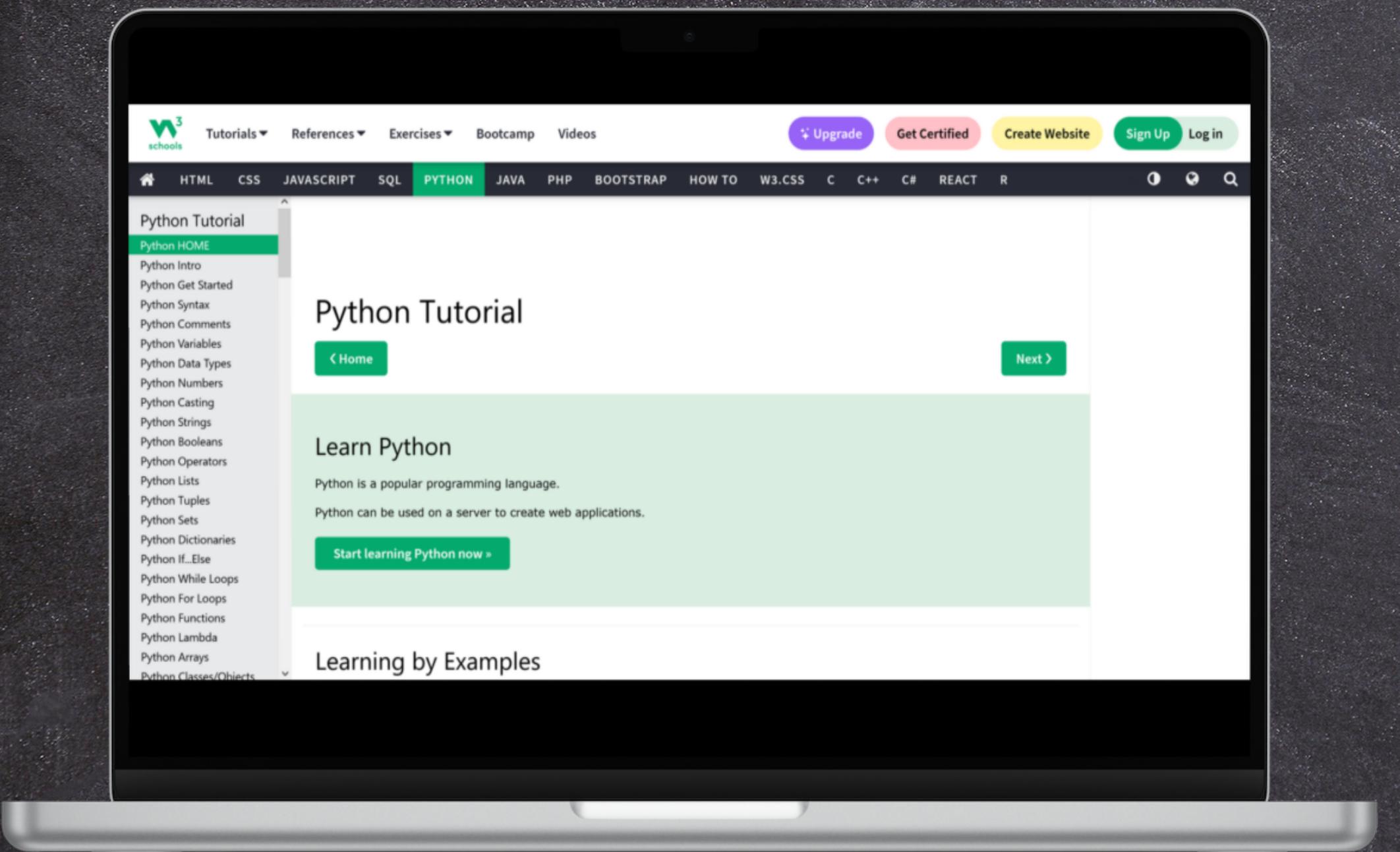


آن کس که بداند و نداند که بداند  
آله نایید که بس خفته نیاند

آن کس که بداند و بداند و بداند که بداند  
اسب خرد از گنبد کردون بجهاند

آن کس که نداند و نداند که نداند  
لنگان خرک خویش به منزل برساند

آن کس که نداند و بداند و بداند که نداند  
در جهل مرکب اید الدهر بیاند



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## Python for Everybody (PY4E)

Hello and welcome to my site where you learn Python even if you have no programming background.

1: Installing Python The first task is to work through the installation steps including installing	2: Why Program? We learn why one might want to learn to program, and look at the basic issues with	3: Variables, expressions and statements We learn how to make variables and store	4: Conditional Execution We look at how Python executes some statements and skips others.
5: Functions Take a brief look at how Python implements the 'store and use later'	6: Loops and Iterations We look at how Python repeats statements using looping structures.	7: Strings We look at how Python stores and manipulates textual data using string	8: Files We learn how to open data files on your computer and read through the files using
9: Lists We look at Python's simplest data structure - the list. Lists can store more	10: Dictionaries The dictionary data structures allows us to store multiple values in an object and look	11: Tuples The tuple is a Python data structure that is like a simple and efficient list.	12: Regular Expressions Regular Expressions allow us to search for patterns in strings and extract data
13: Network Programming We take a quick look at how data moves across the network using the HyperText	14: Using Web Services Web services allow a program to access data available in a different server.	15: Object-Oriented Programming We do a quick look at how Python supports the Object-Oriented	16: Databases Databases give us very fast random access to large amounts of data. There is

Select Language | ▾

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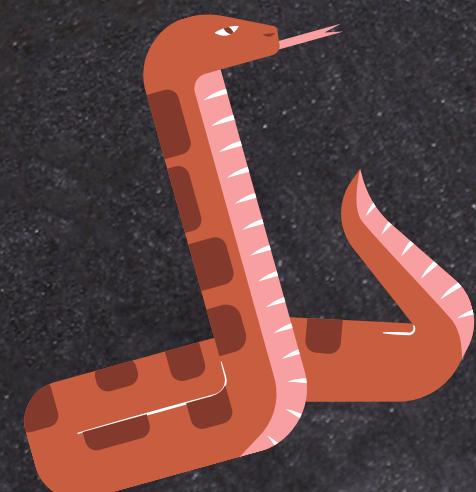


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# Python Programming

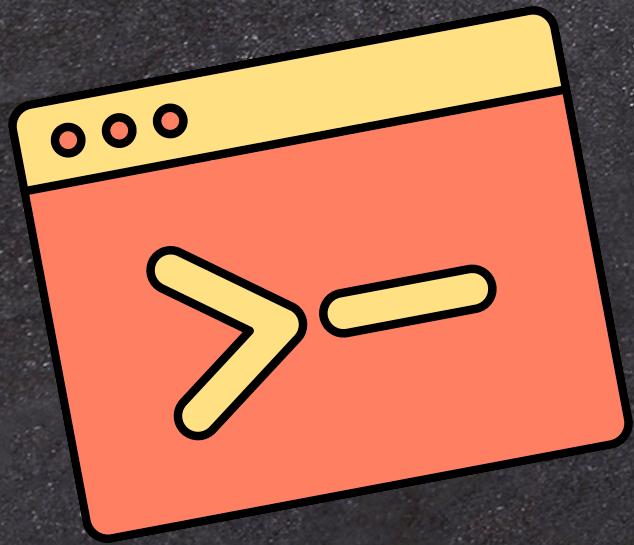
An introduction to Python



Session 02



# A brief review...



int float  
str bool

TRUE

FALSE

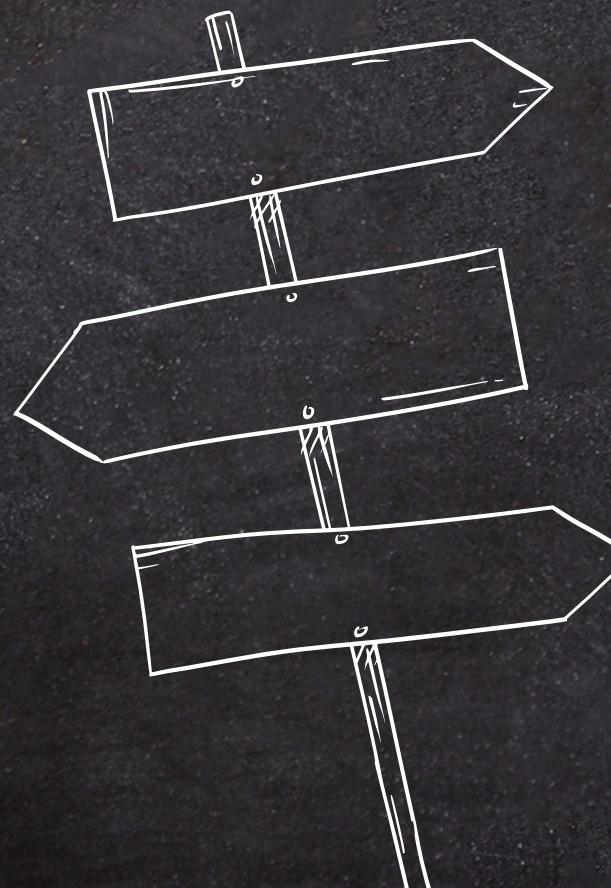
>=



reviews



# Conditional Statements



What plan in what conditions..?



# Logical Operators

How `<or>` and `<and>` operators work.

x	y	x or y	x	y	x and y
+	+	+	+	+	+
+	-	+	+	-	-
-	+	+	-	+	-
-	-	-	-	-	-

Note that it's not necessary to give two operands to `<or>` and `<and>` operators. Point is that only if all of conditions (regardless of number of them) are true, then `<and>` returns true, and even if one of the conditions (again regardless of number of them) is true, then `<or>` returns true.

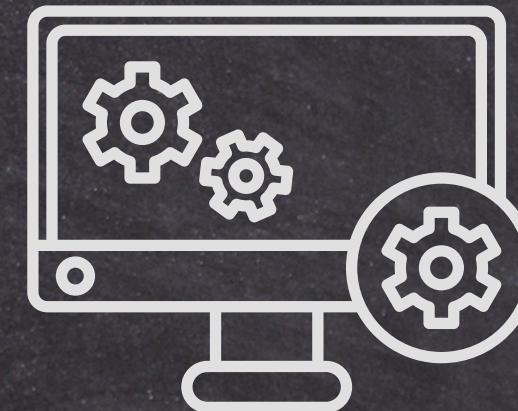


# Guess the number!

Who is smarter; you or your computer?



VS

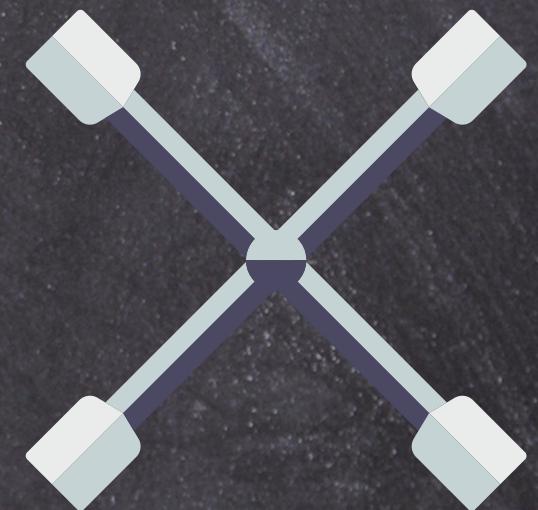




# Iterations!

Leave the borings to the computer!

repeat





# While Loop

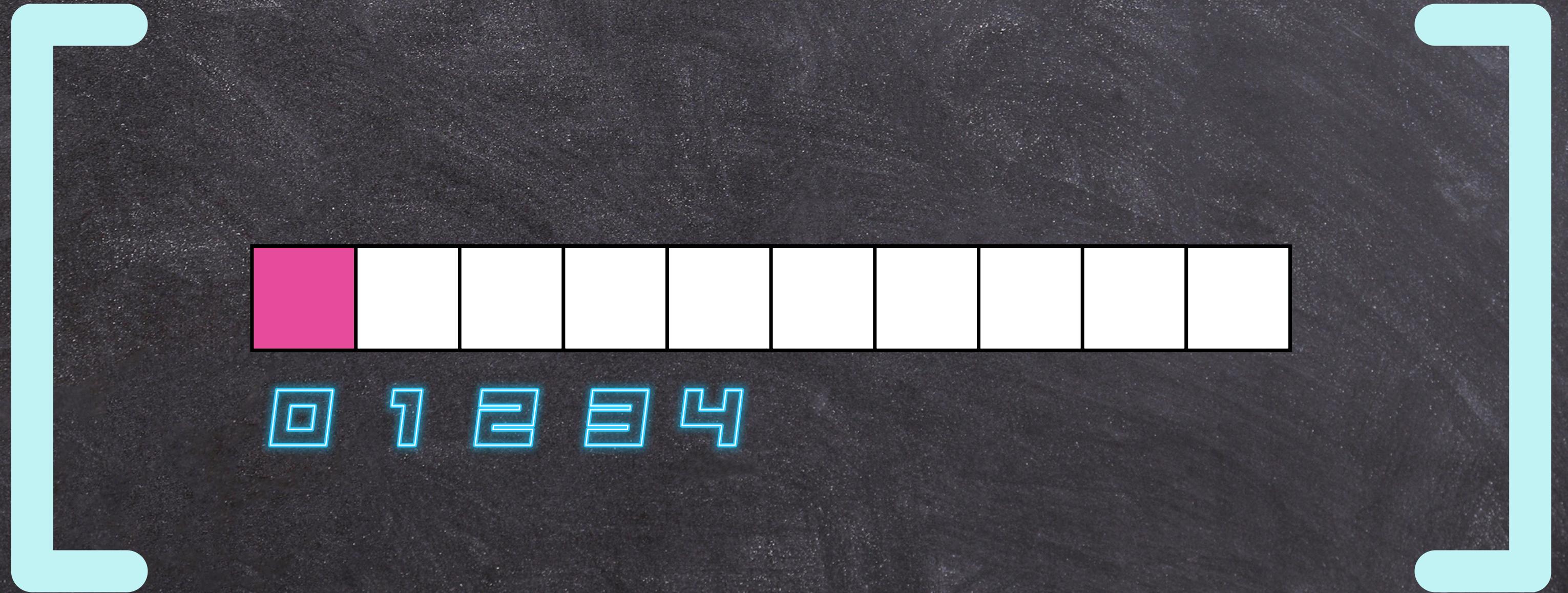
Ok, but till when...???





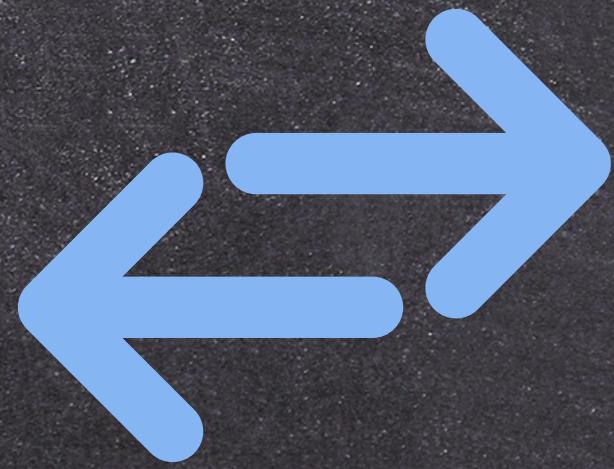
# Liiiiiiiiissssst

"Python lists: the multitasking champions of programming. They hold data, they sort it, they reverse it, they even make sandwiches. Okay, maybe not the sandwich part, but they can definitely handle your data like a boss!"





Duplicatable



Changeable



Ordered



# Foooooor

Python developers have a special 'for'mula for success: 'for' loops,  
'for' fun, and 'for'getting to close parentheses!



# Break





**CONTINUE**



Method	Description
<code>append()</code>	Adds an element at the end of the list
<code>clear()</code>	Removes all the elements from the list
<code>copy()</code>	Returns a copy of the list
<code>count()</code>	Returns the number of elements with the specified value
<code>extend()</code>	Add the elements of a list (or any iterable), to the end of the current list
<code>index()</code>	Returns the index of the first element with the specified value
<code>insert()</code>	Adds an element at the specified position
<code>pop()</code>	Removes the element at the specified position
<code>remove()</code>	Removes the item with the specified value
<code>reverse()</code>	Reverses the order of the list
<code>sort()</code>	Sorts the list



په بار دیده معدلت خنده؟





# لیست خریدت چیه؟





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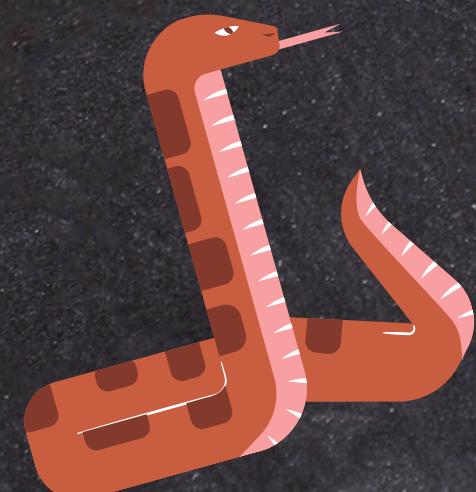


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# Functions

"Functions in Python - they swoop in, do their job, and save the day, all while looking cool and efficient."





# Dictionaries

Dictionaries are used to store data values in key:value pairs.

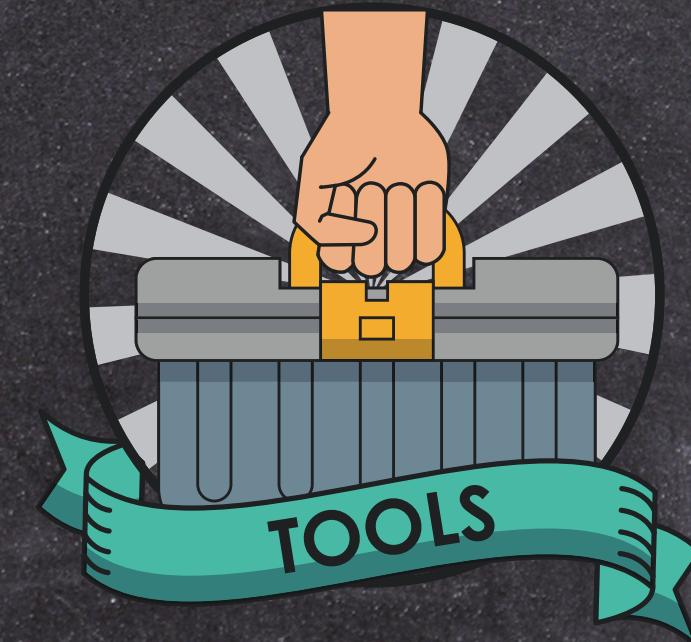




{KEY : VALUE}



# Modules



22

22

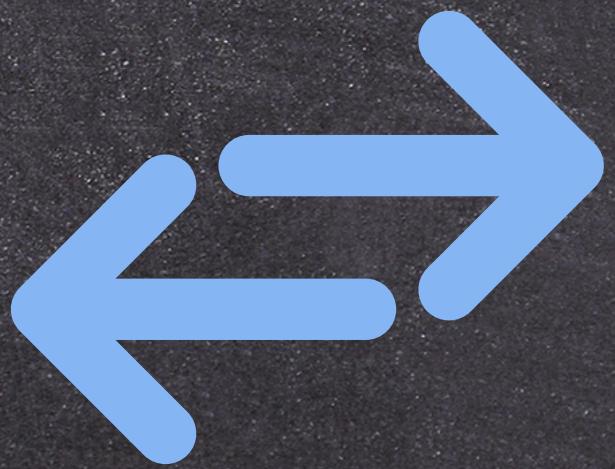


# String things





Duplicate



Changeable



Ordered



Method	Description
<a href="#"><u>clear()</u></a>	Removes all the elements from the dictionary
<a href="#"><u>copy()</u></a>	Returns a copy of the dictionary
<a href="#"><u>fromkeys()</u></a>	Returns a dictionary with the specified keys and value
<a href="#"><u>get()</u></a>	Returns the value of the specified key
<a href="#"><u>items()</u></a>	Returns a list containing a tuple for each key value pair
<a href="#"><u>keys()</u></a>	Returns a list containing the dictionary's keys
<a href="#"><u>pop()</u></a>	Removes the element with the specified key
<a href="#"><u>popitem()</u></a>	Removes the last inserted key-value pair
<a href="#"><u>setdefault()</u></a>	Returns the value of the specified key. If the key does not exist: insert the key, with the specified value
<a href="#"><u>update()</u></a>	Updates the dictionary with the specified key-value pairs
<a href="#"><u>values()</u></a>	Returns a list of all the values in the dictionary