

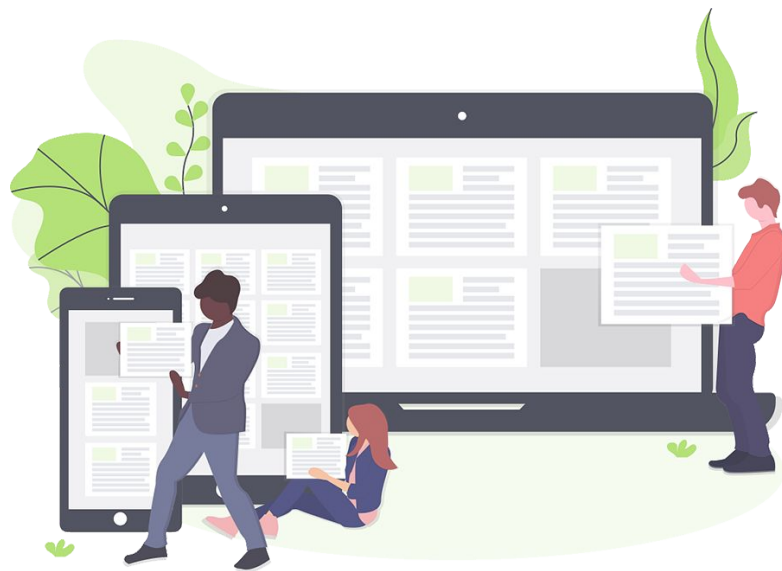
UCLA TeachLA

Python: Getting Started



Agenda

- What is Python
- How to code in Python online
- Write your first program

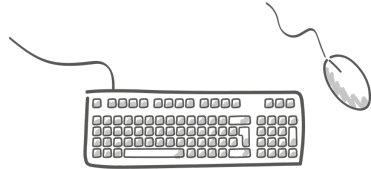


What is Python?
What can it do?



Your **computer** can do 4 things:

- **Input** (keyboard, camera)
- **Storage** (saving and reading information)
- **Processing** (do math to things)
- **Output** (video, audio output)



It's kind of similar to what we do

- **Input** (hearing, vision)
- **Storage** (memory)
- **Processing** (brain activity)
- **Output** (speech, motion)



Your **code is a set of instructions
for your computer**

(tells your computer **how
to do the 4 things)**

Python is a coding language

**The computer understands
Python. Easy.**

Edpuzzle time

- In computer science, what is Python?
 - A kind of snake
 - A coding language

Edpuzzle time

- In computer science, what is Python?
 - A kind of snake
 - A coding language

**How can I write and
run Python code?**

Here are 2 ways:

Choose your editor:

Programiz

- ✗ Can't save your work
- ✓ Don't need to create an account
- ✓ Online

UCLA editor

- ✓ Can save your work
- ✗ Need to create an account
- ✓ Online

1. Code online:

<https://www.programiz.com/python-programming/online-compiler/>

- No account needed
- Cannot save your work (make sure to copy/paste your code somewhere else before you close tab)

2. Use our online editor:

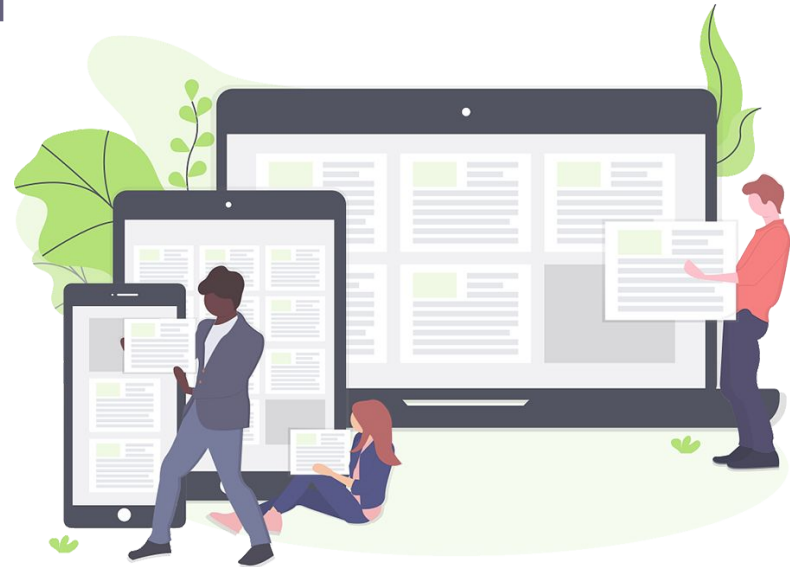
<https://editor.uclaacm.com/>

- Need to create account (no email needed)
- Can save your work

Cannot Run Python Online?

Download [Visual Studio Code](#) and save your code as a python file (.py extension)

If this is your first time coding, we recommend using online editors (just while learning)



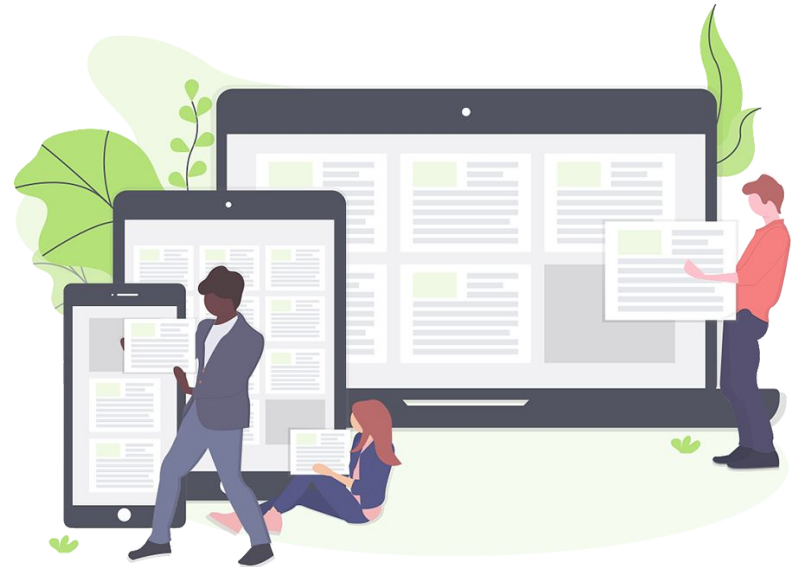
Hello World

Our first Python program

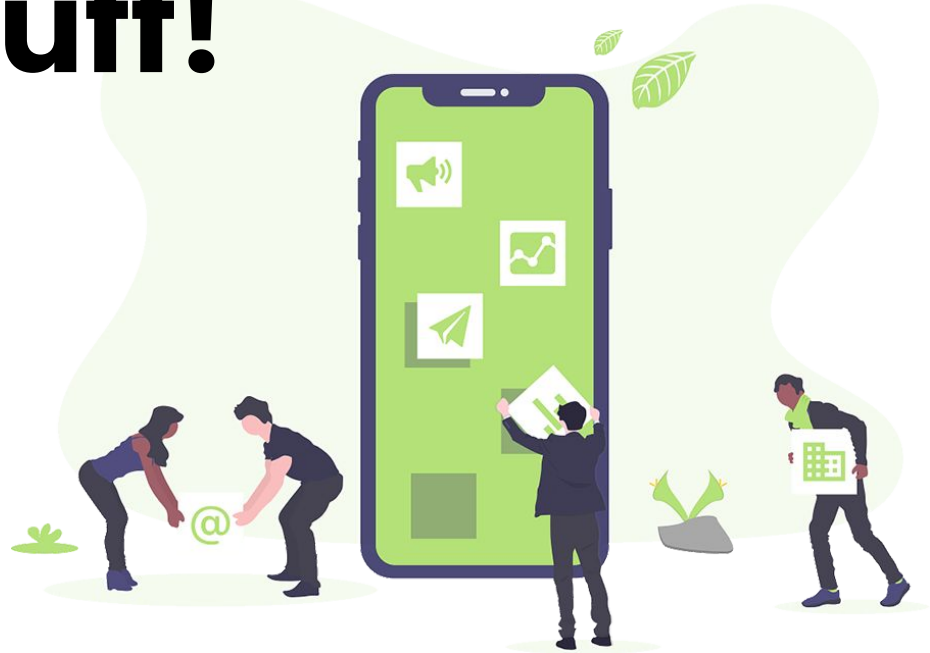


Recap

- Python is a coding language
- How to code Python online!
- `print("Hello World")`



Python: Keyboard Stuff!



Useful characters in Python

~ `	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9) 0	- _	+ =	← Backspace
Tab ↔	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	| \ _
Caps Lock ↑	A	S	D	F	G	H	J	K	L	: ;	" '	↵ Enter	
Shift ↑	Z	X	C	V	B	N	M	< ,	> .	? /	↵ Shift		
Ctrl	Win Key	Alt							Alt	Win Key	Menu	Ctrl	










Shift + 9 open parentheses (

~ ,	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9	) 0	- _	+ =	← Backspace
Tab ↔	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	| \ _
Caps Lock ↑	A	S	D	F	G	H	J	K	L	: ;	" '	Enter ↵	
Shift ↑	Z	X	C	V	B	N	M	< ,	> .	? /	Shift ↑		
Ctrl	Win Key	Alt								Alt	Win Key	Menu	Ctrl

Shift + 0 Close parentheses)

~ ,	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9	) 0	- _	+ =	← Backspace
Tab ↔	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	| \ _
Caps Lock ↑	A	S	D	F	G	H	J	K	L	: ;	" '	Enter ↵	
Shift ↑	Z	X	C	V	B	N	M	< ,	> .	? /	Shift ↑		
Ctrl	Win Key	Alt								Alt	Win Key	Menu	Ctrl

+ plus symbol

~ ,	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9	) 0	- _	+ = 	 Backspace
Tab  	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	| \ _
Caps Lock 	A	S	D	F	G	H	J	K	L	: ;	" '	Enter  	
Shift 	Z	X	C	V	B	N	M	< ,	> .	? /	Shift 		
Ctrl	Win Key	Alt								Alt	Win Key	Menu	Ctrl

- hyphen-minus

~ ,	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9	) 0	- _	+ =	← Backspace
Tab ↔	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	| \ _
Caps Lock ↑	A	S	D	F	G	H	J	K	L	: ;	" '	Enter ↵		
Shift ↑	Z	X	C	V	B	N	M	< ,	> .	? /	Shift ↑			
Ctrl	Win Key	Alt									Alt	Win Key	Menu	Ctrl

* asterisk (also used as a multiplication sign)

~ ,	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9	) 0	- _	+ =	← Backspace
Tab ↔	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	| \ /
Caps Lock ↑	A	S	D	F	G	H	J	K	L	: ;	" '	Enter ↵	
Shift ⬆	Z	X	C	V	B	N	M	< ,	> .	? /	Shift ⬆		
Ctrl	Win Key	Alt								Alt	Win Key	Menu	Ctrl

/ forward slash (also division sign)

~ `	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9	) 0	- _	+ =	← Backspace
Tab ↔	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	| \ _
Caps Lock ↑	A	S	D	F	G	H	J	K	L	: ;	" '	Enter ↵	
Shift ↑	Z	X	C	V	B	N	M	< ,	> .	? /	Shift ↑		
Ctrl	Win Key	Alt							Alt	Win Key	Menu	Ctrl	

“ ” Quotation Marks

~ ,	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9	) 0	- _	+ =	← Backspace
Tab ↔	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	| \
Caps Lock ↑	A	S	D	F	G	H	J	K	L	: ;	" '	Enter ↵	
Shift ↑	Z	X	C	V	B	N	M	< ,	> .	? /	Shift ↑		
Ctrl	Win Key	Alt								Alt	Win Key	Menu	Ctrl

Shift + ; colon :

~ ,	! 1	@ 2	# 3	\$ 4	% 5	^ 6	& 7	* 8	(9	) 0	- _	+ =	← Backspace
Tab ↔	Q	W	E	R	T	Y	U	I	O	P	{ [	} ]	| \ _
Caps Lock ↑	A	S	D	F	G	H	J	K	L	: ; :	" '	Enter ↵	
Shift ↑	Z	X	C	V	B	N	M	< ,	> .	? /	Shift ↑		
Ctrl	Win Key	Alt							Alt	Win Key	Menu	Ctrl	

Mac vs PC keyboards

Mac:

Shortcuts usually use
Command + something

E.g.

Copy:

⌘(command) + C

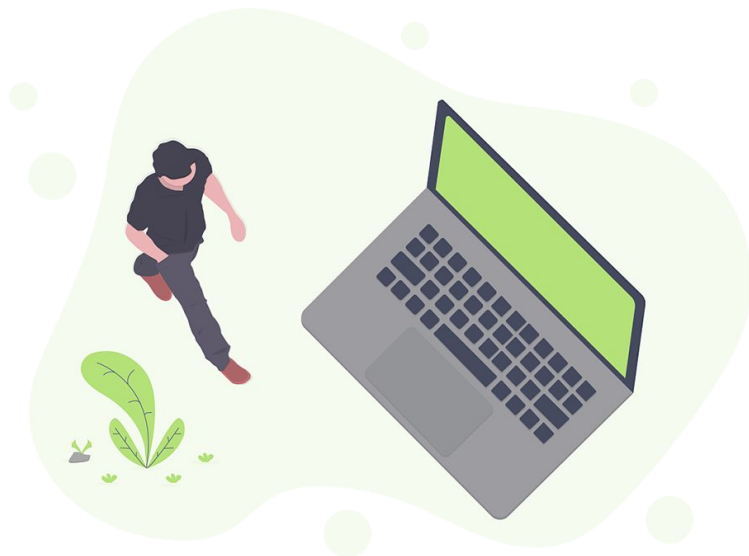
Mac:

Shortcuts usually use
Control + something

E.g.

Copy:

Ctrl + C



Happy coding!

