

Introduction to Python

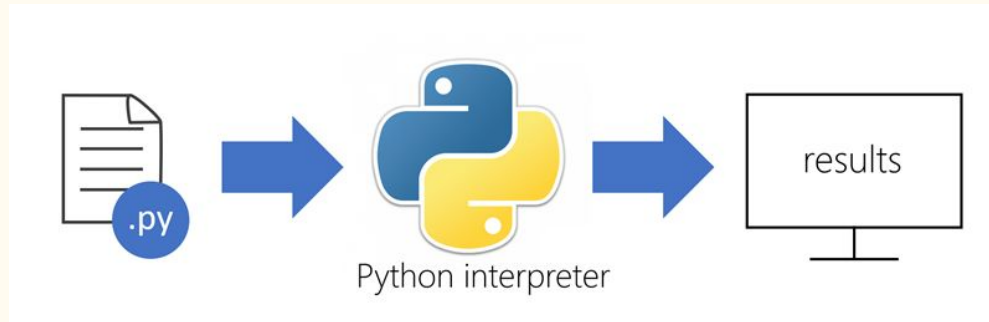
Introduction

What is Python?

Python is an object-oriented programming language ==> Based around “classes” and “objects”

Python is high-level ==> Simple and easy to read

Python is interpreted ==> The code goes to the interpreter, which reads the code and then executes it



Python Reserved Words

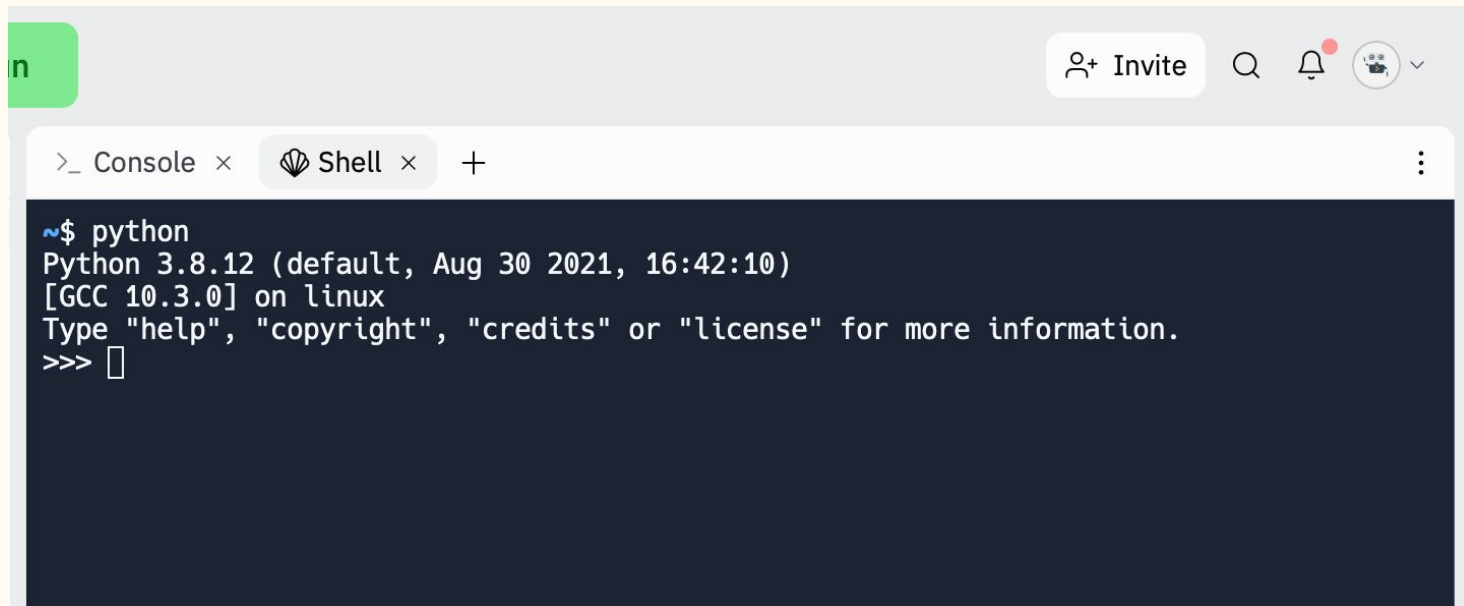
Have special meaning to Python.

Should not be used as a name for a variable.

and	as	assert	class	continue	def
del	elif	else	except	finally	for
from	global	if	import	in	is
lambda	nonlocal	not	or	pass	raise
return	try	while	with	yield	

Let's write some Python code

- Open your Replit
- Type *python* on the shell and the Python interpreter will start to work



The screenshot shows a Replit interface with a light gray header bar. On the left is a green tab with the letter 'n'. On the right are icons for 'Invite', search, notifications, and a settings menu. Below the header is a white bar with tabs for '>_ Console' and 'Shell' (which is active and has a shell icon). To the right of the tabs is a plus sign and a vertical ellipsis. The main area is a dark blue terminal window. It shows the command '~\$ python' being entered. The output is: 'Python 3.8.12 (default, Aug 30 2021, 16:42:10)', '[GCC 10.3.0] on linux', and 'Type "help", "copyright", "credits" or "license" for more information.' The prompt '>>>' is followed by a cursor.

```
>_ Console × Shell × +  
~$ python  
Python 3.8.12 (default, Aug 30 2021, 16:42:10)  
[GCC 10.3.0] on linux  
Type "help", "copyright", "credits" or "license" for more information.  
>>> █
```

Let's write some Python code

The `print()` function prints the specified message to the screen. Let's try:

```
>>> print('Hello world!')
```

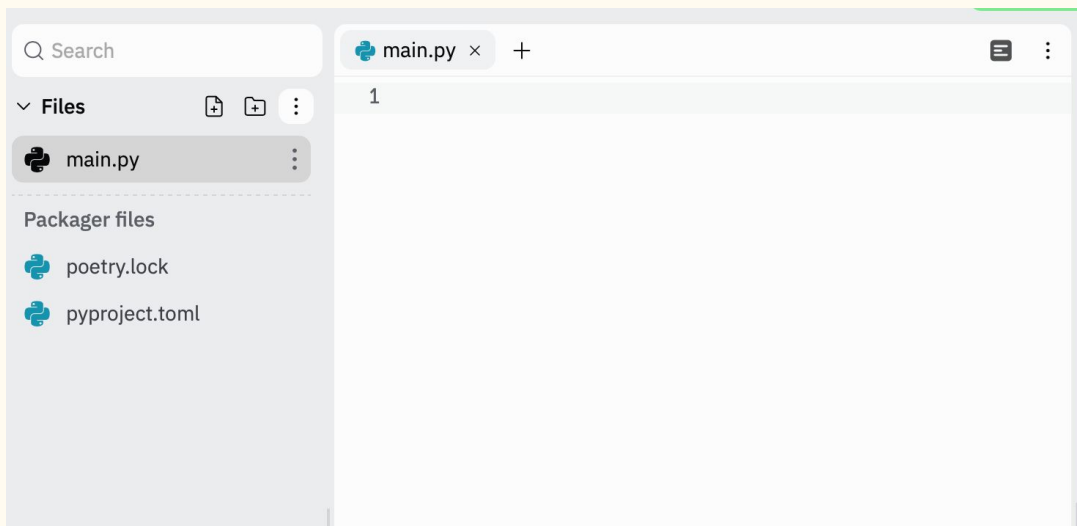
Hello world!

Tasks:

- Try to print other messages
- How do you print a number?

Writing a program

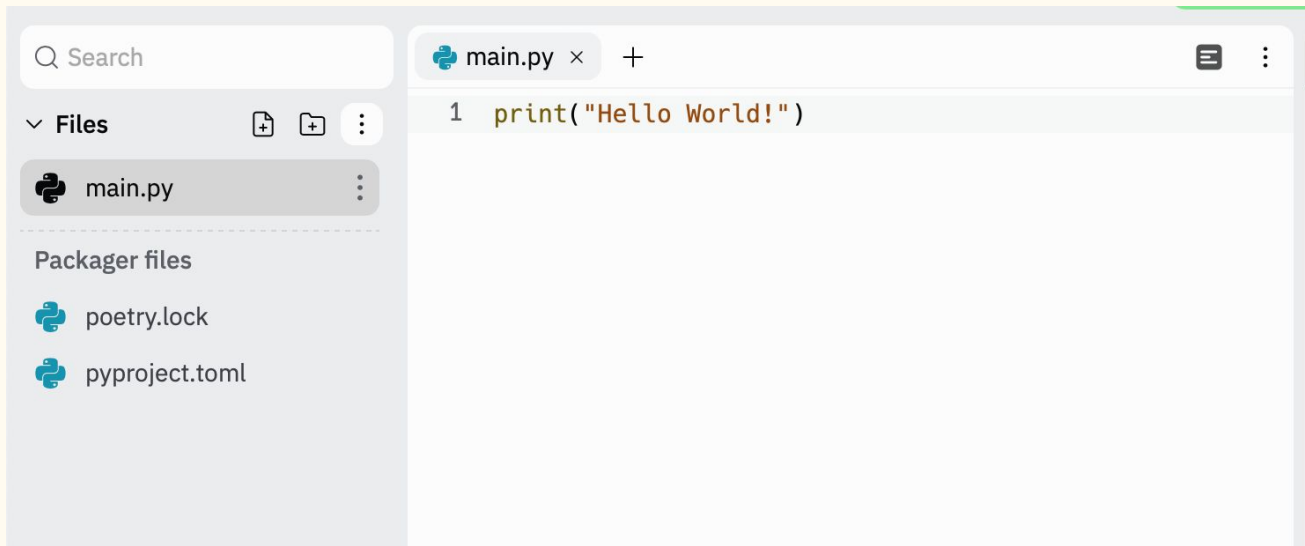
On your Replit create a file *main.py*. It will contain your Python code. This file is called **script**.



NOTE: Python scripts always have `.py` as extension.

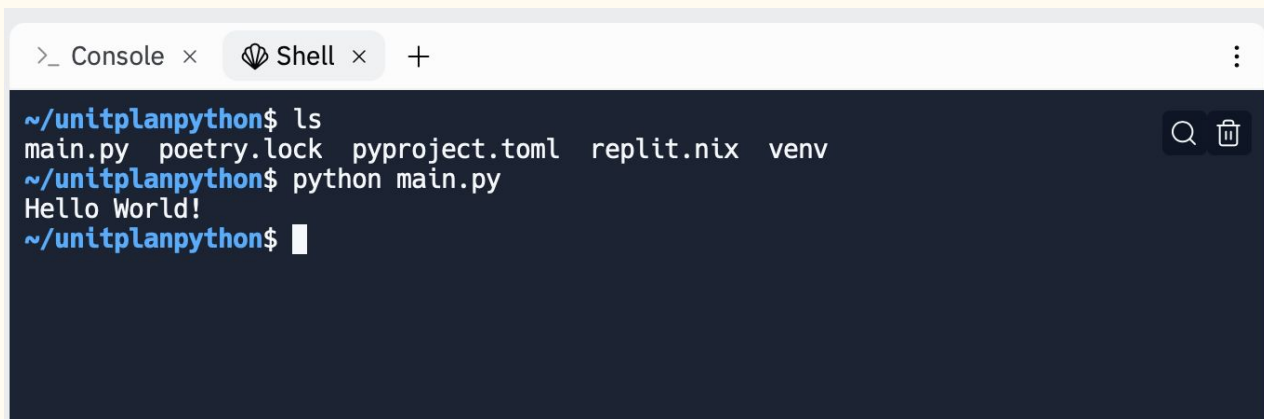
Writing a program

Let's write in your script the code that prints our traditional Hello World! by typing it inside `print()` function.



Running your script

- Go to the shell in Replit
- Type `python main.py` (make sure you are in the directory where the script is located)
- Your program will be executed and you will see the result in the shell

A screenshot of a Replit shell window. The window has a title bar with tabs for 'Console' and 'Shell', and a plus sign to add more. The 'Shell' tab is active. The terminal shows the following commands and output:

```
~/unitplanpython$ ls
main.py  poetry.lock  pyproject.toml  replit.nix  venv
~/unitplanpython$ python main.py
Hello World!
~/unitplanpython$
```

- Add more lines of code using the function `print()`
- Then, run your script from the shell again

INDIVIDUAL ACTIVITY

1. WORK ON “00 LAB - INTRODUCTION”
2. COMPLETE YOUR DAILY LOG
PROGRAMMING

QUESTIONS?