

[Introduction to Programming](#)

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/ Writing programs for Python

# Writing programs for Python

## What is happening

Python isn't an editor you use to write your program. Python is what runs your code once you've written it.

Your program is stored as a simple text file, which you give the file extension `.py` like `my_first_program.py`. This is written in a text editor or a specialist Python editor - for example, IDLE is a code editor which comes with Python. You may prefer a different editor and if so this is fine. For example, some people use VSCode, PyCharm or Spyder. These notes assume you are using IDLE.

Once you have written and saved your program, you can run it using Python. What Python does is read the program you have written and execute it. Some editors allow you to run Python on a program you have written, but you can also run

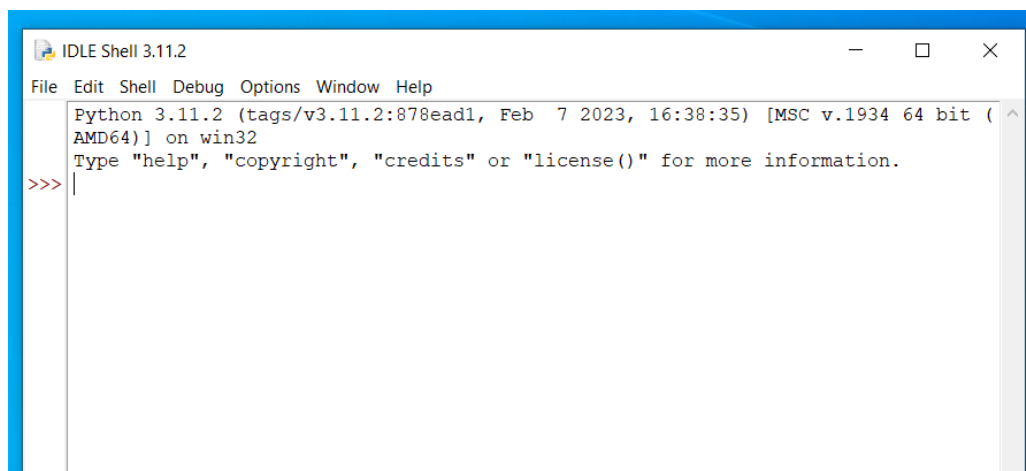
```
python filename.py
```

from the command line to execute your code through Python.

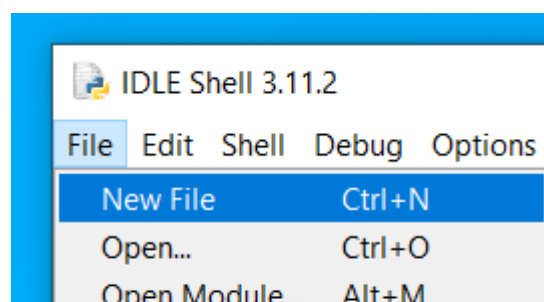
## Writing and running a program via IDLE on Windows

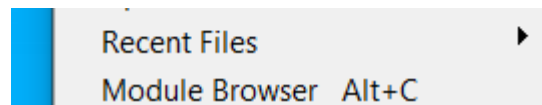
This page explains how to load IDLE on Windows and use it to write and run your first program. It is fine to use a different editor and a different system if you prefer, adapting the instructions below.

1. Open IDLE. The easiest way is to click the Start menu and search for 'idle'.
2. When this opens, it shows you the IDLE Shell. This is where we typed commands previously, and it's where your programs will run.

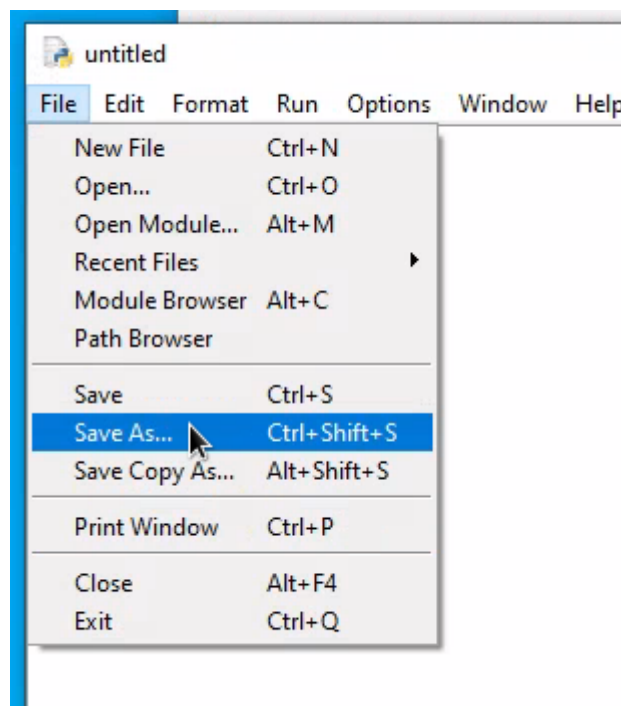


3. Go File > New File (or press Ctrl+N) to start a new program file.



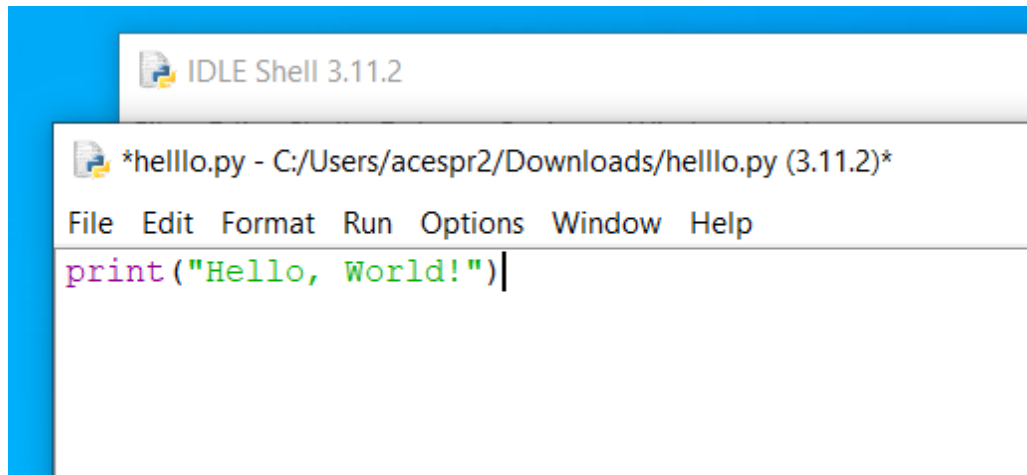


4. Save your new file somewhere using File > Save As (or Ctrl+S). Choose somewhere sensible to keep your files for this module. For example, you might have a "year 1" folder and create within this a folder called "programming". Within this, you might create a folder for each week, so put today's code in `year 1\programming\week 3` for example.

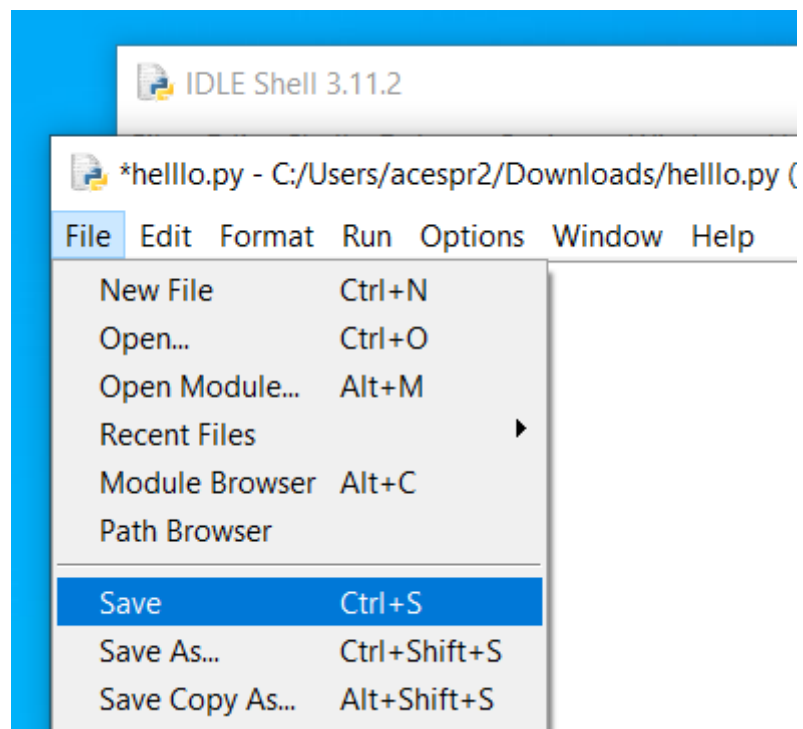


5. Write some code. For example, the one line program below is a traditional first program.

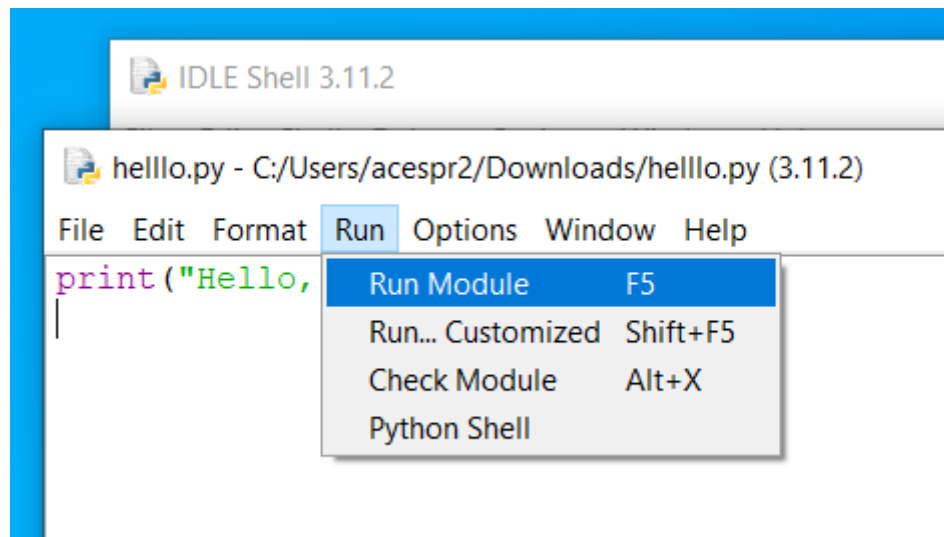
```
print("Hello, World!")
```



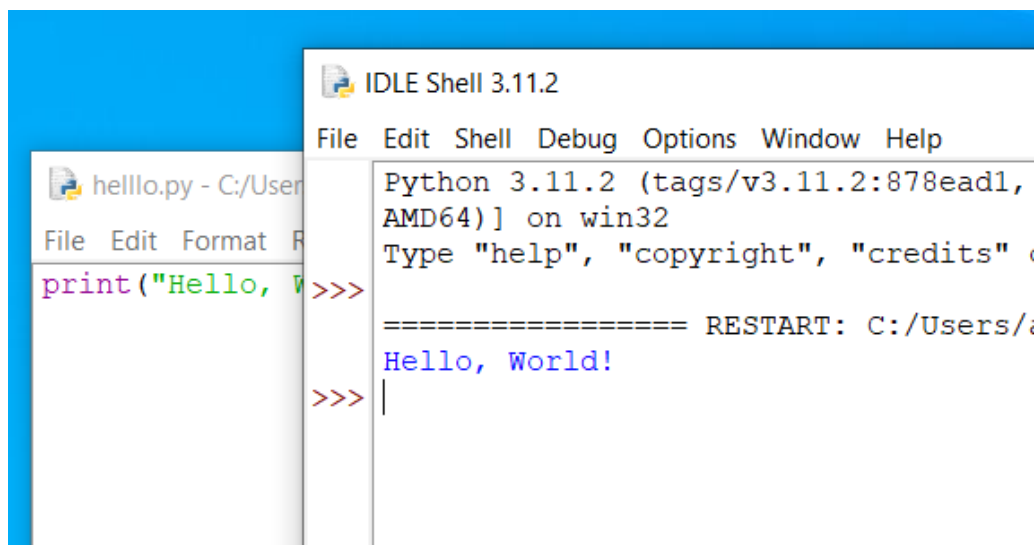
6. Save the new code, either via File > Save or press Ctrl+S.



7. Choose Run > Run Module or press F5. This asks Python to process your code and displays the output in the IDLE Shell window.



8. It runs! (I hope!) Hooray!



## Next time you want to use Python

If you are starting a new program, just follow these instructions. If you are writing a longer program, you can continue to work on a file: in step 3 choose File > Open... rather than New File.

