Import

We can create and import our own modules

Allows us to use functions defined in different files

Python allows us to import files from our current directory, or the directories stored in **sys.path**

Checking whether __name__ == "__main__" allows us to conditionally execute code in a file

E.g. Code which executes when we run **python3 file.py** but not when we **import file**

Example: When you import this file, main() is executed!
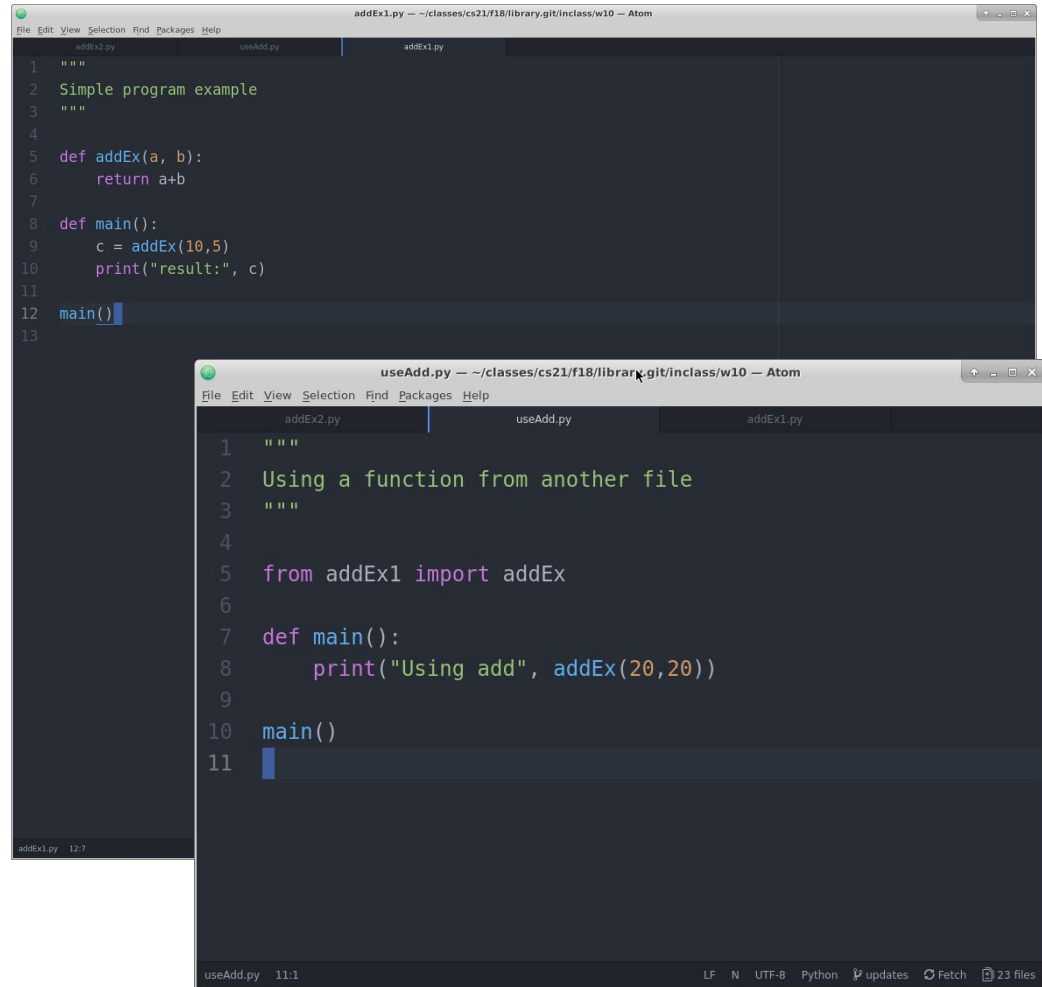
NOTE: To import, we can say

```
import addEx1
```

and call `addEx1.add`

or

```
from addEx1 import addEx
```

and call `addEx`
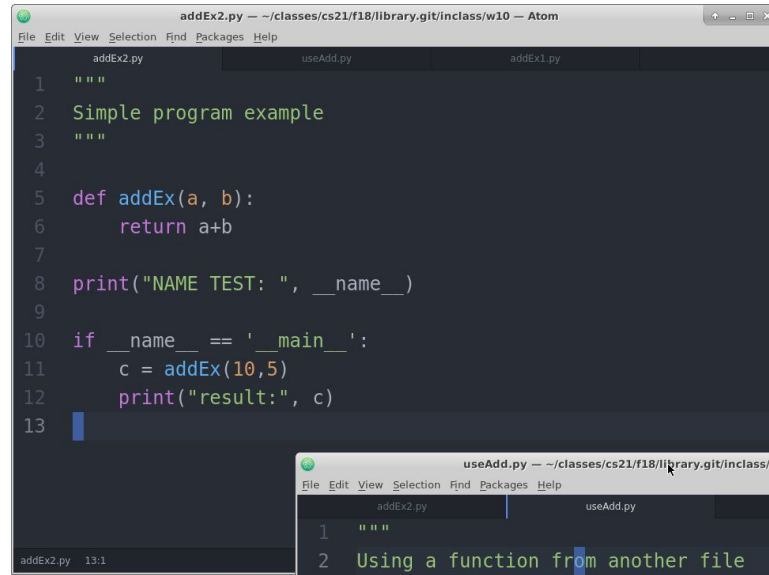
Example: When you import this file, main() is NOT executed!

NOTE: __name__ is a special variable which Python initializes when it executes a file. When you run
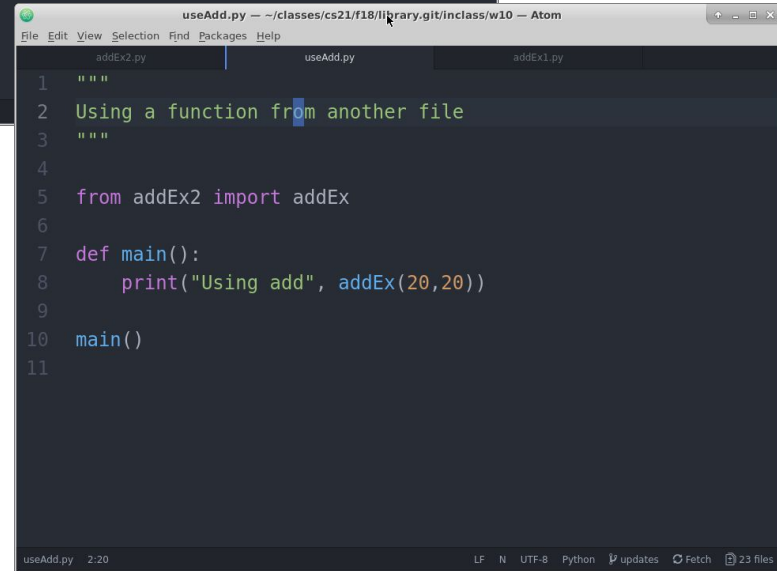
python3 addEx2.py

__name__ is "__main__"

Otherwise,

__name__ is "addEx2"

```
addEx2.py — ~/classes/cs21/f18/library.git/inclass/w10 — Atom
File  Edit  View  Selection  Find  Packages  Help
        addEx2.py              useAdd.py              addEx1.py
1    """
2    Simple program example
3    """
4
5    def addEx(a, b):
6        return a+b
7
8    print("NAME TEST: ", __name__)
9
10   if __name__ == '__main__':
11       c = addEx(10,5)
12       print("result:", c)
13
addEx2.py   13:1
```

```
useAdd.py — ~/classes/cs21/f18/library.git/inclass/w10 — Atom
File  Edit  View  Selection  Find  Packages  Help
        addEx2.py              useAdd.py              addEx1.py
1    """
2    Using a function from another file
3    """
4
5    from addEx2 import addEx
6
7    def main():
8        print("Using add", addEx(20,20))
9
10   main()
11
useAdd.py   2:20                          LF  N  UTF-8  Python  updates  Fetch  23 files
```