A Byte of Python

"A Byte of Python" is a free book on programming using the Python language. It serves as a tutorial or guide to the Python language for a beginner audience. If all you know about computers is how to save text files, then this is the book for you.

For Python version 3

This book will teach you to use Python version 3. There will also be guidance for you to adapt to the older and more common Python version 2 in the book.

For details on differences between Python 2 and Python 3, see:

- The future of Python 2
- Porting Python 2 Code to Python 3
- Writing code that runs under both Python2 and 3
- Supporting Python 3: An in-depth guide

https://wiki.python.org/moin/PortingToPy3k/BilingualQuickRef

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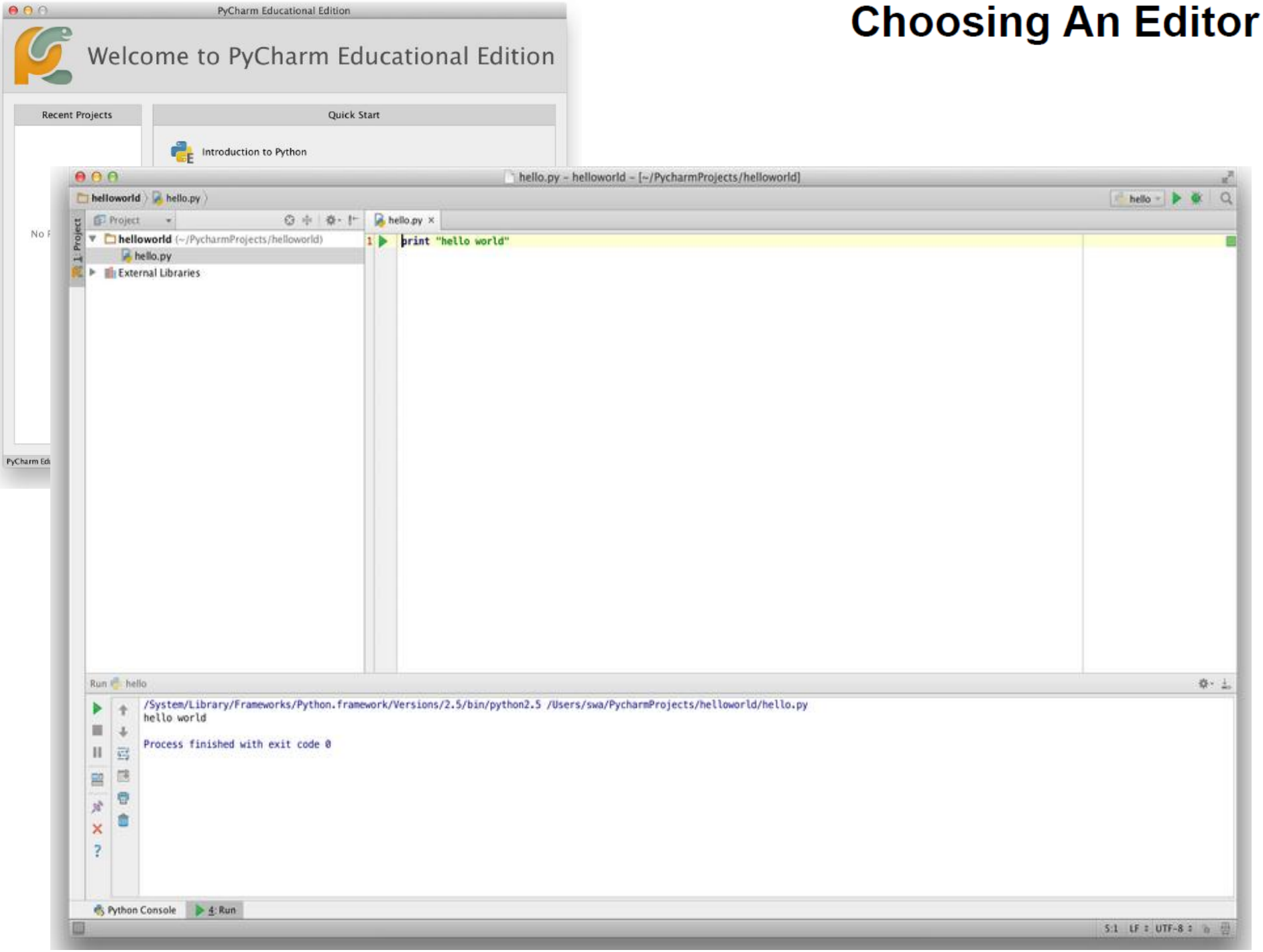
Choosing An Editor



Choosing An Editor

Vim

1. Install Vim
   - Mac OS X users should install `macvim` package via HomeBrew
   - Windows users should download the "self-installing executable" from Vim website
   - GNU/Linux users should get Vim from their distribution's software repositories, e.g. Debian and Ubuntu users can install the `vim` package.
2. Install jedi-vim plugin for autocompletion.
3. Install corresponding `jedi` python package : `pip install -U jedi`

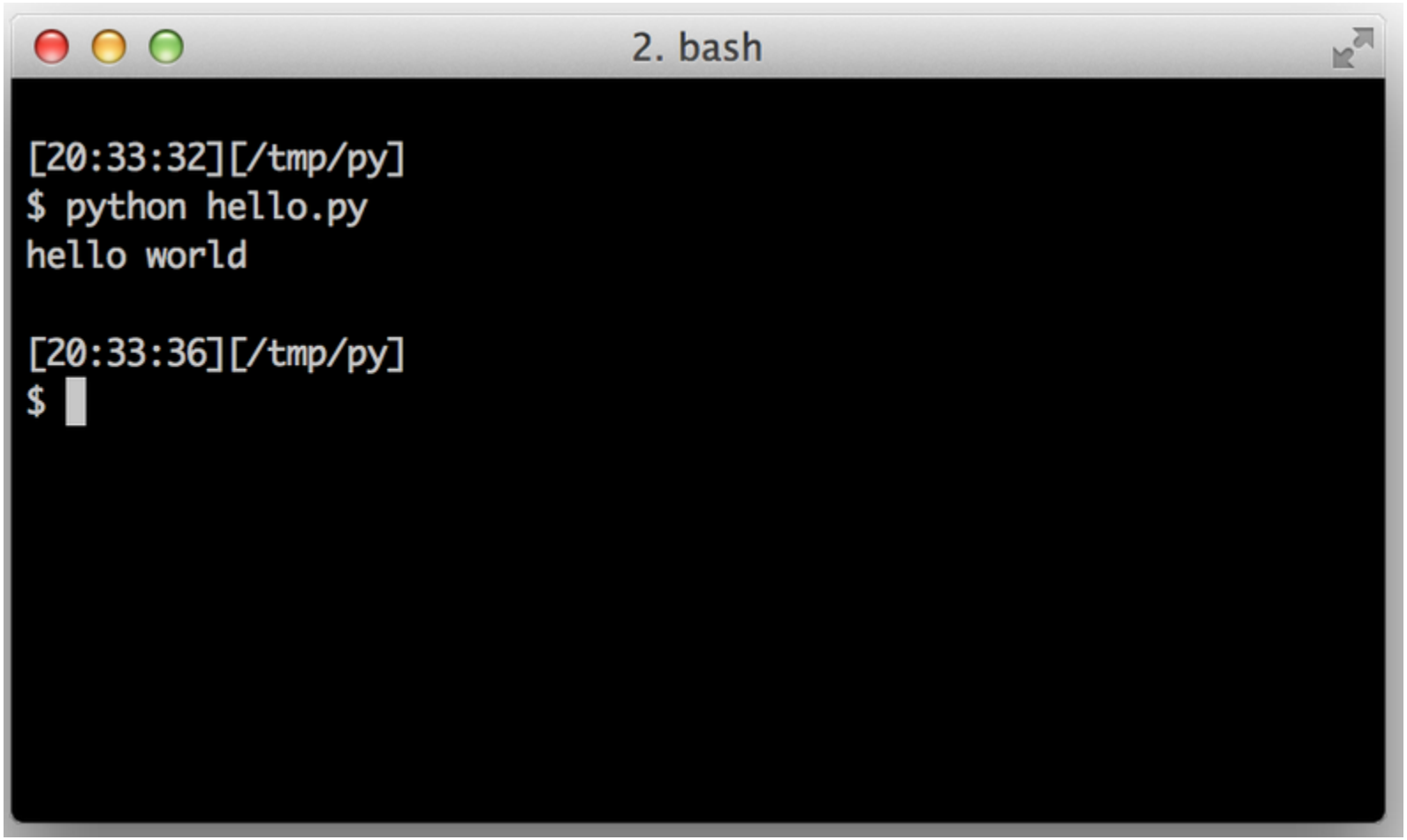
Emacs

1. Install Emacs 24+.
   - Mac OS X users should get Emacs from http://emacsformacosx.com
   - Windows users should get Emacs from http://ftp.gnu.org/gnu/emacs/windows/
   - GNU/Linux users should get Emacs from their distribution's software repositories, e.g. Debian and Ubuntu users can install the `emacs24` package.
2. Install ELPY

Using A Source File

To run your Python program:

1. Open a terminal window (see the previous Installation chapter on how to do that)
2. **C**hange **d**irectory to where you saved the file, for example, `cd /tmp/py`
3. Run the program by entering the command `python hello.py` . The output is as shown below.



>>>

The Interpreter Prompt

Once you have started Python, you should see `>>>` where you can start typing stuff.

```
$ python3
Python 3.6.0 (default, Jan 12 2017, 11:26:36)
[GCC 4.2.1 Compatible Apple LLVM 8.0.0 (clang-800.0.38)] on darwin
Type "help", "copyright", "credits" or "license" for more information.
>>> print("Hello World")
Hello World
```

How to Quit the Interpreter Prompt

If you are using a GNU/Linux or OS X shell, you can exit the interpreter prompt by pressing `[ctrl + d]` or entering `exit()` (note: remember to include the parentheses, `()`) followed by the `[enter]` key.

If you are using the Windows command prompt, press `[ctrl + z]` followed by the `[enter]` key.

Getting Help

```
>>> help()
>>> help('len')
>>> help('return')
```

If you need quick information about any function or statement in Python, then you can use the built-in `help` functionality. This is very useful especially when using the interpreter prompt. For example, run `help('len')` - this displays the help for the `len` function which is used to count number of items.

TIP: Press `q` to exit the help.

Similarly, you can obtain information about almost anything in Python. Use `help()` to learn more about using `help` itself!

In case you need to get help for operators like `return`, then you need to put those inside quotes such as `help('return')` so that Python doesn't get confused on what we're trying to do.