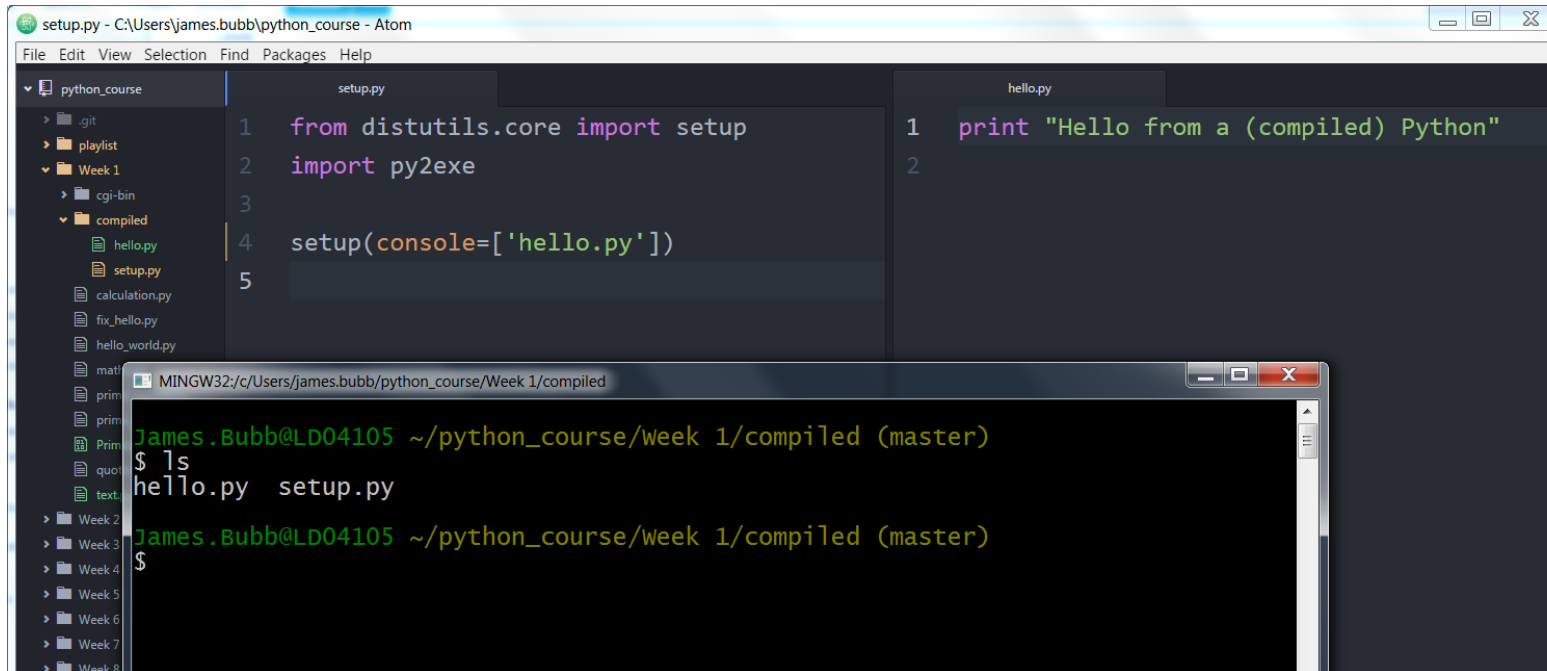


Compiling a Python Program with py2exe

- 1) Download a copy of **py2exe** from <http://www.py2exe.org/>
- 2) Create two files:
 - hello.py – the file you want to compile
 - setup.py – the installer script



The screenshot shows the Atom text editor with two files open: `setup.py` and `hello.py`. The `setup.py` file contains the following code:

```
1 from distutils.core import setup
2 import py2exe
3
4 setup(console=['hello.py'])
5
```

The `hello.py` file contains the following code:

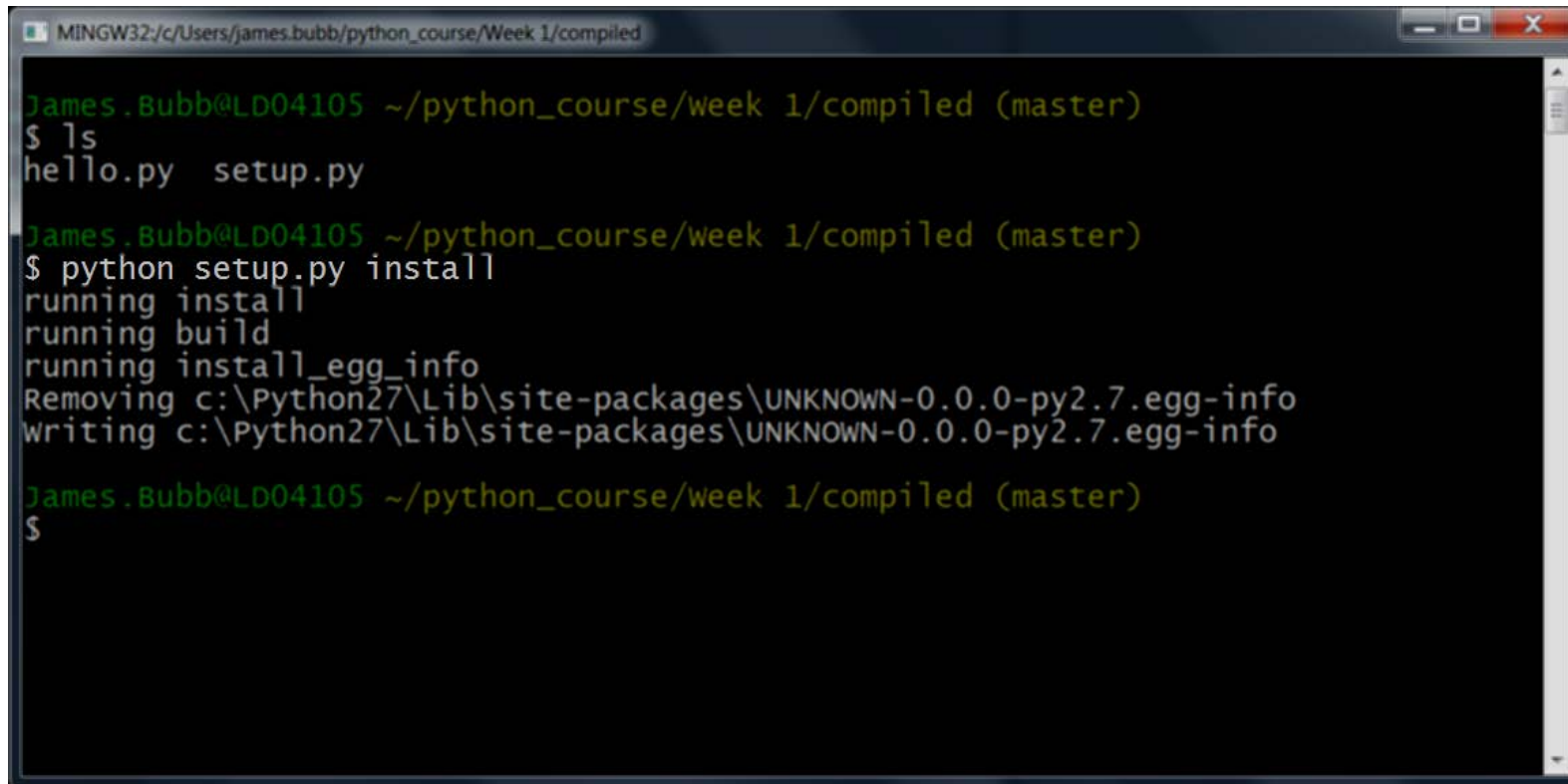
```
1 print "Hello from a (compiled) Python"
2
```

Below the editor, a terminal window is open, showing the command prompt and the output of the `ls` command:

```
James.Bubb@LD04105 ~/python_course/week 1/compiled (master)
$ ls
hello.py  setup.py
James.Bubb@LD04105 ~/python_course/week 1/compiled (master)
$
```

In the installer script **setup.py** make sure the **console** argument has the name of the program you want to compile e.g. **hello.py**

3) Run the setup script by typing in **python setup.py install** at your command prompt.



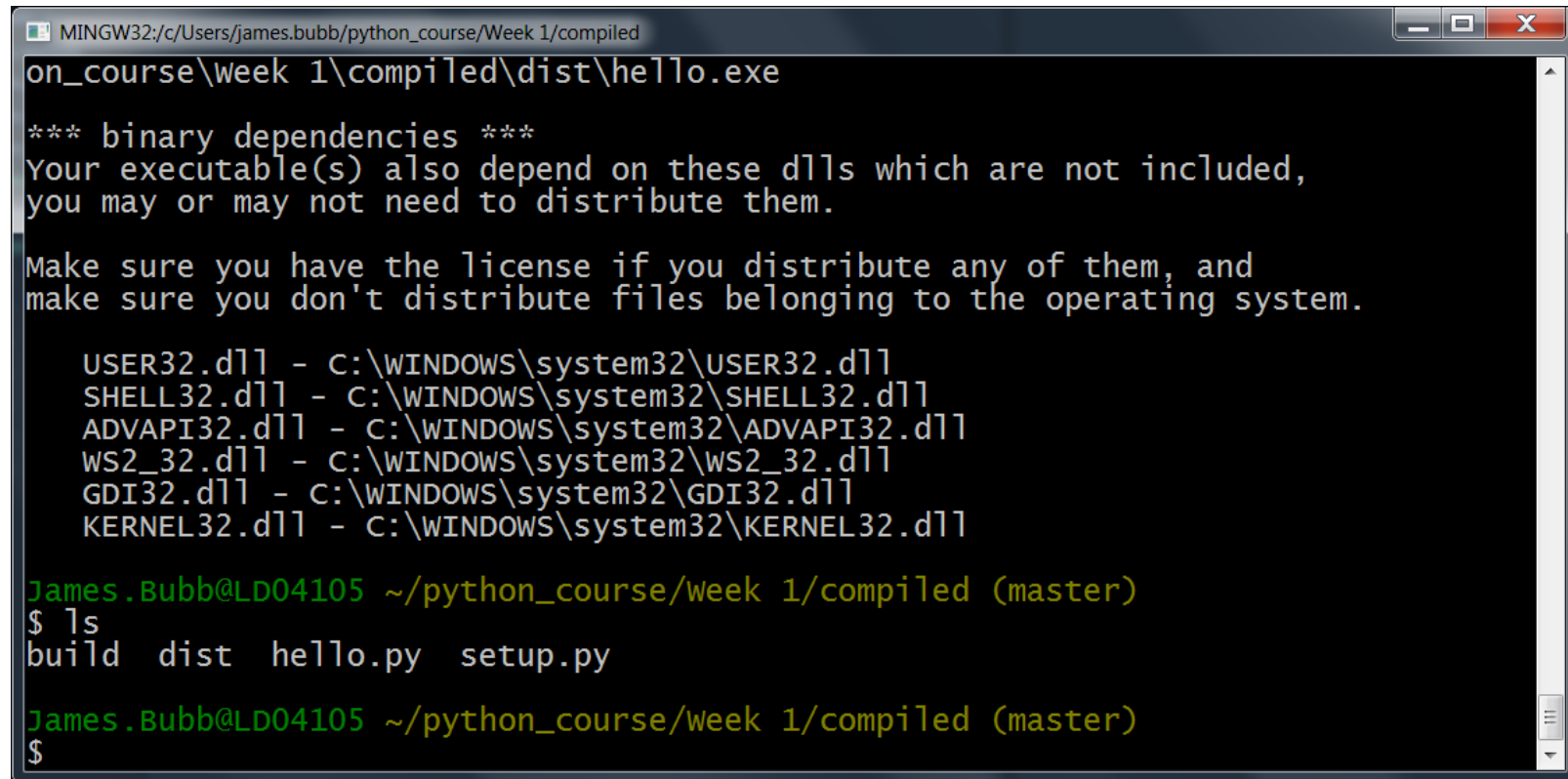
```
MINGW32/c/Users/james.bubb/python_course/Week 1/compiled

James.Bubb@LD04105 ~/python_course/week 1/compiled (master)
$ ls
hello.py  setup.py

James.Bubb@LD04105 ~/python_course/week 1/compiled (master)
$ python setup.py install
running install
running build
running install_egg_info
Removing c:\Python27\Lib\site-packages\UNKNOWN-0.0.0-py2.7.egg-info
writing c:\Python27\Lib\site-packages\UNKNOWN-0.0.0-py2.7.egg-info

James.Bubb@LD04105 ~/python_course/week 1/compiled (master)
$
```

- 4) Next, type in **python setup.py py2exe** to run py2exe. You will get loads of output but should see some folders created at the end.



```
MINGW32/c/Users/james.bubb/python_course/Week 1/compiled
on_course\week 1\compiled\dist\hello.exe

*** binary dependencies ***
Your executable(s) also depend on these dlls which are not included,
you may or may not need to distribute them.

Make sure you have the license if you distribute any of them, and
make sure you don't distribute files belonging to the operating system.

USER32.dll - C:\WINDOWS\system32\USER32.dll
SHELL32.dll - C:\WINDOWS\system32\SHELL32.dll
ADVAPI32.dll - C:\WINDOWS\system32\ADVAPI32.dll
WS2_32.dll - C:\WINDOWS\system32\WS2_32.dll
GDI32.dll - C:\WINDOWS\system32\GDI32.dll
KERNEL32.dll - C:\WINDOWS\system32\KERNEL32.dll

James.Bubb@LD04105 ~/python_course/week 1/compiled (master)
$ ls
build  dist  hello.py  setup.py

James.Bubb@LD04105 ~/python_course/week 1/compiled (master)
$
```

- 5) If you open up the **dist** folder either in Windows explorer or typing **cd dist** in the command line you will see your compiled file, in this case **hello.exe**

```
MINGW32:/c/Users/james.bubb/python_course/Week 1/compiled/dist
WS2_32.dll - C:\WINDOWS\system32\WS2_32.dll
GDI32.dll - C:\WINDOWS\system32\GDI32.dll
KERNEL32.dll - C:\WINDOWS\system32\KERNEL32.dll

James.Bubb@LD04105 ~/python_course/week 1/compiled (master)
$ ls
build  dist  hello.py  setup.py

James.Bubb@LD04105 ~/python_course/week 1/compiled (master)
$ cd dist/

James.Bubb@LD04105 ~/python_course/week 1/compiled/dist (master)
$ ls
_hashlib.pyd  hello.exe  python27.dll  unicodedata.pyd
bz2.pyd       library.zip  select.pyd    w9xpopen.exe

James.Bubb@LD04105 ~/python_course/week 1/compiled/dist (master)
$ hello.exe
Hello from a (compiled) Python

James.Bubb@LD04105 ~/python_course/week 1/compiled/dist (master)
$
```

And that's it!