Creating an egg

You can think of an egg as just an alternative to a source distribution or Windows executable, but it should be noted that for pure Python eggs, the egg file is completely cross-platform. We will take a look at how to create our own egg using the package we created in a previous modules and packages chapter. To get started creating an egg, you will need to create a new folder and put the **mymath** folder inside it. Then create a **setup.py** file in the parent directory to mymath with the following contents:

```
from setuptools import setup, find_packages

setup(
    name = "mymath",
    version = "0.1",
    packages = find_packages()
    )
```

Python has its own package for creating distributions that is called **distutils**. However instead of using Python's **distutils' setup** function, we're using **setuptools' setup**. We're also using setuptools' **find_packages** function which will automatically look for any packages in the current directory and add them to the egg. To create said egg, you'll need to run the following from the command line:

```
c:\Python34\python.exe setup.py bdist_egg
```

This will generate a lot of output, but when it's done you'll see that you have three new folders: **build**, **dist**, and **mymath.egg-info**. The only one we care

about is the **dist** folder in which you will find your egg file, **mymath-0.1-py3.4.egg**. Note that on my machine, I forced it to run against Python 3.4 so that it would create the egg against that version of Python. The egg file itself is basically a zip file. If you change the extension to "zip", you can look inside it and see that it has two folders: **mymath** and **EGG-INFO**. At this point, you should be able to point **easy_install** at your egg on your file system and have it install your package.

Wrapping Up

Now it's your turn. Go onto the Python Package Index and find some pure Python modules to download. Then try creating eggs using the techniques you learned in this chapter. If you want to install an egg, you can use **easy_install**. Uninstalling an egg is a bit tougher. You will have to go to its install location and delete the folder and / or egg file it installed as well as remove the entry for the package from the **easy-install.pth** file. All of these items can be found in your Python's **site-packages** folder.