This chapter will use Lua as a stand-alone scripting language and will teach you the basics of the language. So you will write simple Lua scripts without using World of Warcraft at all. If you are already familiar with executing Lua scripts in World of Warcraft, it is of course no problem if you use the built-in Lua interpreter (for example with a mod like TinyPad or WoWLua).But I’m assuming that you have never used Lua before, so I’ll start with a little tutorial to help you create a working development environment.

Feel free to skip this chapter if you already know Lua.

using lua

If you are using an IDE that comes with a Lua interpreter, like the version of SciTE presented in Chapter 1, you are ready to work. Just create a new \*.lua file and press the Run key (F5 in SciTE) to execute it

However, if you choose to use a text editor that has no native support for Lua scripts, you have to set up Lua first. You can download the source code of Lua at <http://www.lua.org> . Binary versions of Lua are available on <http://luabinaries.luaforge.net> for Windows, Linux and OS X. Just download the package for your system and extract it to a new folder. It consists of a few files, of which the following two are important to us:

lua5.1.exe is the Lua interpreter. If you run it without arguments, it will enter the interac\_tive mode, a command-line interface that allows you to type in and execute Lua scripts line by line. It can also handle uncompiled Lua scripts in text form or compiled byte code files （\*.luc）. Byte code is a machine-readable form of your program, and loading a byte code version of your script is slightly faster than loading the original source code. World of Warcraft automati\_cally translates your addons into byte code when logging in. You can execute your Lua scripts by executing the following command:

lua5.1.exe “YourFile.lua”

There are also a few options available:

lua5.1.exe is the Lua compiler; it compiles Lua scripts to Lua byte code. You are not going to need it for World of Warcraft, as the game does not accept compiled Lua scripts. Using it is simple; just provide the file name of the script you want to compile and it will produce a \*lua file.

Tip If you are unsure how to use these command-line-based programs, just use the provided version of SciTE or Lua in World of Warcraft with TinyPad or WoWLua.

Now let’s get started with learning Lua. You have a slight advantage if you already know another scripting language, but you should still read this chapter. It is very important that you understand Lua before starting with World of Warcraft programming. However, if you still want to skip the chapter, do so.

Note that some parts of the chapter might be hard going if you have never programmed anything before; if you are feeling lost when reading the sections about functional program\_ming techniques, object-oriented programming, or regular expressions, don’t worry. We are going to create some great World of Warcraft addons and you will learn a lot while creating the example mods in the book. If there are sections you don’t completely understand this time, you can revisit them when we use these programming techniques in a real addon.