Why Linux?

Linux, like its parental UNIX, is a fantastic platform on which to code. Not only does Linux come pre-installed with Python modules and command-line execution, but it also has a wealth of other programming languages built-in to its framework.

FREE AND OPEN

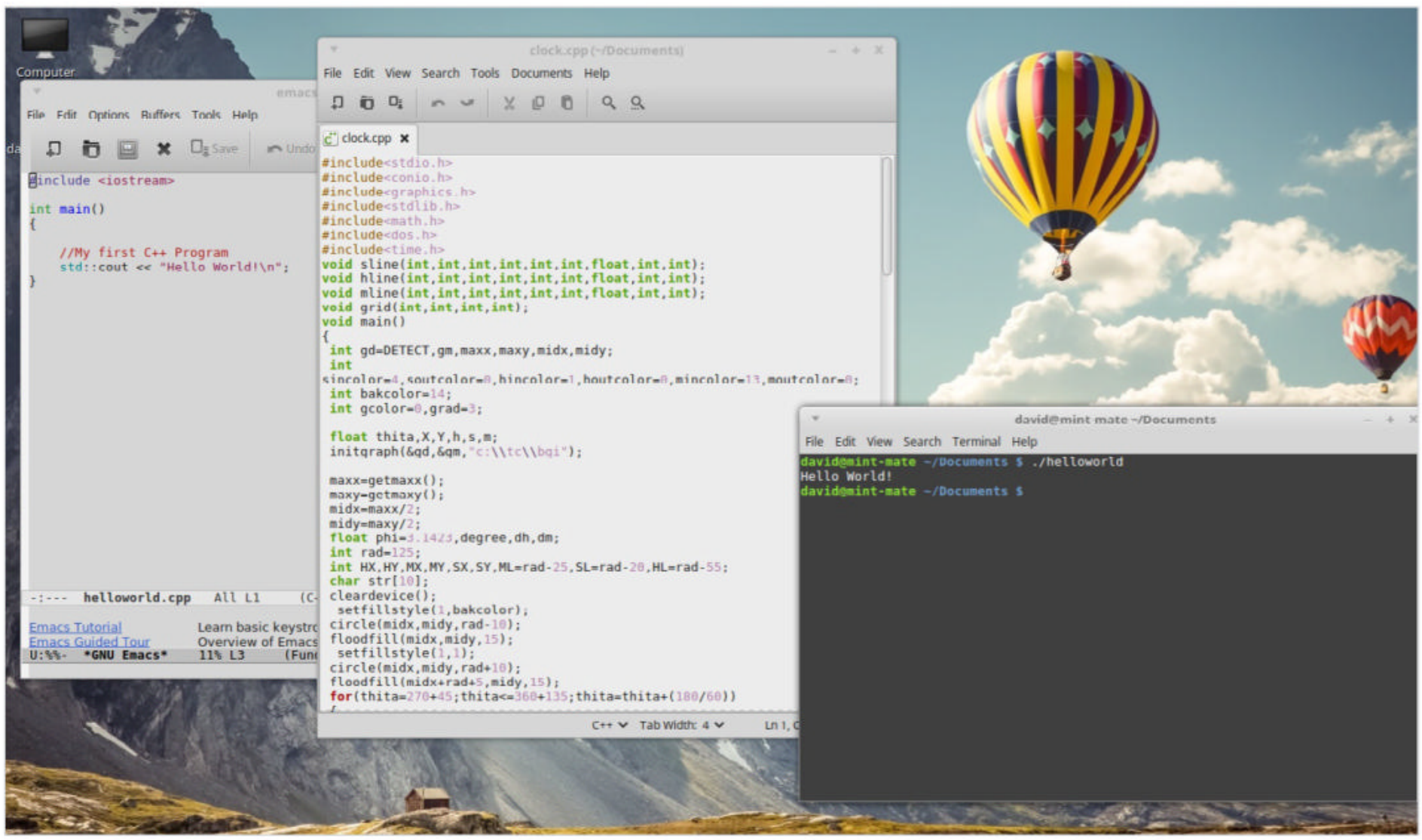
Linux is a fantastic fit for those who want something different. The efficiency of the system, the availability of applications, and its stability are just a few reasons why it's a great Python coding resource.

The first thing we need to address is that there is no such operating system called Linux. Linux is, in fact, the operating system kernel, the core component of an OS. When talking about Linux, what we, and others, are referring to is one of the many distributions, or distros, that use the Linux kernel. No doubt you've heard of at least one of the current popular distros: Ubuntu, Linux Mint, Fedora, openSUSE, Debian, Raspbian… the list goes on. Each one of these distros offers the user something a little different. While each has the Linux kernel at its core, they provide different looking desktop environments, different pre-loaded applications, different ways in which to update the system and get more apps installed, and a slightly different look and feel throughout the entire system. However, at the centre lies Linux; which is why we say, Linux.

Linux works considerably differently to Windows or macOS. It's free for a start, free to download, free to install on as many computers as you like, free to use for an unlimited amount of time, and free to upgrade and extend with, equally, free programs and applications. This free to use element is one of the biggest draws for the developer. While a Windows license can cost up to £100, and a Mac considerably more, a user, be they a developer, gamer, or someone who wants to put an older computer to use, can quickly download a distro and get to work in a matter of minutes.

Alongside the free to use aspect, comes a level of freedom to customise and mould the system to your own uses. Each of the distros available on the Internet have a certain 'spin', in that some offer

Linux is a great operating system in which to start coding.



increased security, a fancy-looking desktop, a gaming specific spin, or something directed toward students. This extensibility makes Linux a more desirable platform to use, as you can quickly mould the system into a development base, including many different kinds of IDEs for the likes of Python, web development, C++, Java and so on; or even a base for online anonymity, perhaps as a Minecraft server, media centre and much more.

Another remarkable advantage for those looking to learning how to code, is that Linux comes with most of the popular coding environments built-in. Both Python and C++ are pre-installed in a high percentage of Linux distros, which means you can start to program almost as soon as you install the system and boot it up for the first time.

Generally speaking, Linux doesn't take up as many system resources as Windows or macOS. By system resources, we mean memory, hard drive space, and CPU load, as the Linux code has been streamlined and is free from third-party 'bloatware', which hogs other systems resources. Of course, a more efficient system means more resources are available for the coding and testing environment, and the programs you will eventually create. Less use of resources also means you can use Linux on older hardware that would normally struggle, or even refuse, to run the latest versions of Windows or macOS. So rather than throwing away an old computer, it can be reused with a Linux distro.

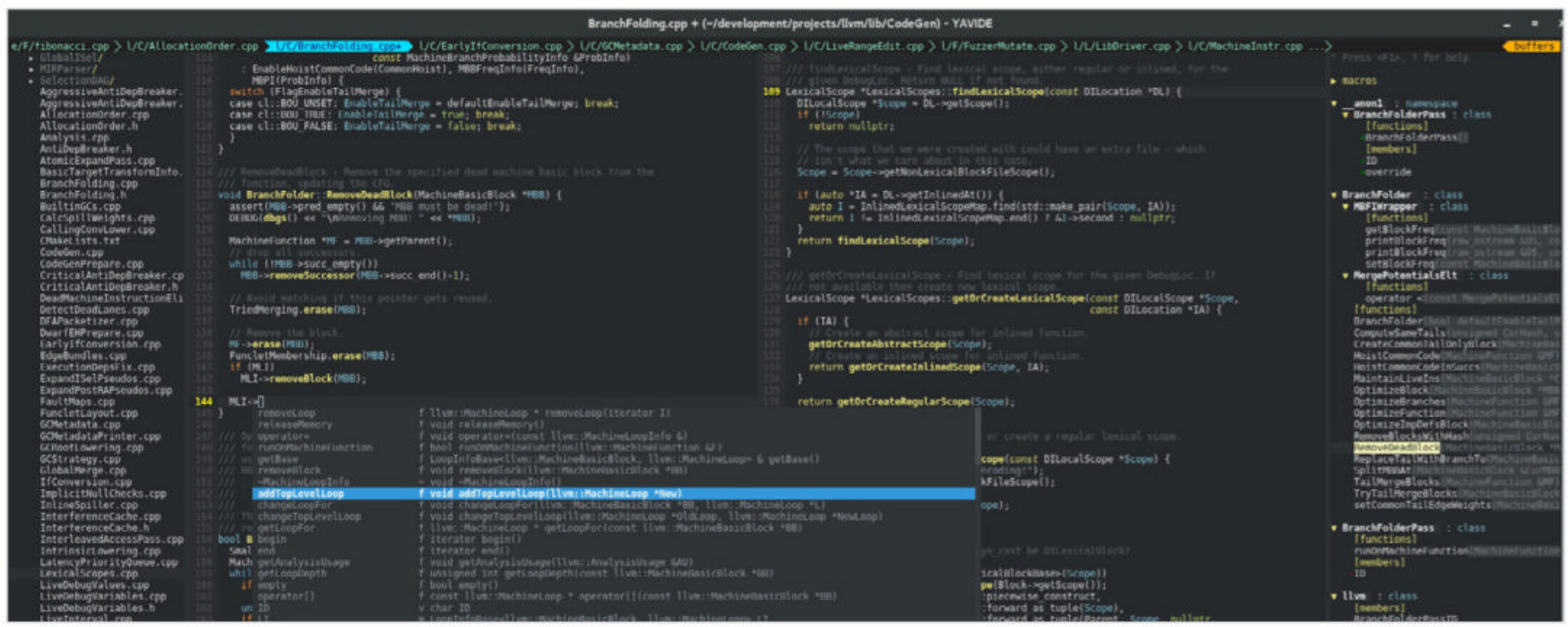
Each distro offers something unique to the user but all have Linux at the core.

There are thousands of free packages available for programmers under Linux.

It's not all about C++, Python, or any of the other more popular programming languages, however. Using the command line of Linux, also called the Terminal, you're able to create Shell scripts, which are programs designed to run from the command line and are made up of scripting languages. They are used mainly to automate tasks, or offer the user some form of input and output for a certain operation.

Finally, although there are many more advantages we could list, there are thousands and thousands of free programs and apps available that cover virtually every aspect of computing. Known as packages, there are (at the time of writing) over 8,700 specific programming applications just on Linux Mint alone, and an incredible 62,000+ overall packages catering from Amateur Radio to WWW tools.

Linux, therefore, is a great resource and environment in which to program. It's perfectly suited for developers and it's continually improving and evolving. If you're serious about getting into coding, or you just want to explore something new, give Linux a try and see how it works for you.



A Linux programming environment can be as simple or as complex as you need it to be.