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Preface

GNU/Linux is one of the most powerful and flexible operating systems in the world. In modern computing, there is absolutely no space where it is not used—from servers, portable computers, mobile phones, tablets to supercomputers, everything runs Linux. While there are beautiful and modern graphical interfaces available for it, the shell still remains the most flexible way of interacting with the system.

In addition to executing individual commands, a shell can follow commands from a script, which makes it very easy to automate tasks. Examples of such tasks are preparing reports, sending e-mails, performing maintenance, and so on. This book is a collection of chapters which contain recipes to demonstrate real-life usages of commands and shell scripts. You can use these as a reference, or an inspiration for writing your own scripts. The tasks will range from text manipulation to performing network operations to administrative tasks.

As with everything, the shell is only as awesome as you make it. When you become an expert at shell scripting, you can use the shell to the fullest and harness its true power. *Linux Shell Scripting Cookbook* shows you how to do exactly that!

What this book covers

Chapter 1, *Shell Something Out*, is an introductory chapter for understanding the basic concepts and features in Bash. We discuss printing text in the terminal, doing mathematical calculations, and other simple functionalities provided by Bash.

Chapter 2, *Have a Good Command*, shows commonly used commands that are available with GNU/Linux. This chapter travels through different practical usage examples that users may come across and that they could make use of. In addition to essential commands, this second edition talks about cryptographic hashing commands and a recipe to run commands in parallel, wherever possible.

Chapter 3, *File In, File Out*, contains a collection of recipes related to files and filesystems. This chapter explains how to generate large-size files, installing a filesystem on files, mounting files, and creating ISO images. We also deal with operations such as finding and removing duplicate files, counting lines in a file collecting details about files, and so on.