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Titolo	Sage beginner's guide [[electronic resource]] : unlock the full potential of Sage for simplifying and automating mathematical computing // Craig Finch
Pubbl/distr/stampa	Olton, Birmingham, : Packt Pub., 2011
ISBN	1-283-34938-8 9786613349385 1-84951-447-X
Descrizione fisica	1 online resource (596 p.)
Disciplina	005.5 300/.7/27
Soggetti	Mathematics - Computer programs Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Sage; Sage; Credits; About the Author; About the Reviewers; www. PacktPub.com; Support files, eBooks, discount offers and more; Why Subscribe?; Free Access for Packt account holders; Preface; What this book covers; What you need for this book; Who this book is for; Conventions; Time for action - heading; What just happened?; Pop quiz - heading; Have a go hero - heading; Reader feedback; Customer support; Downloading the example code; Errata; Piracy; Questions; 1. What Can You Do with Sage?; Getting started; Using Sage as a powerful calculator; Symbolic mathematics; Have a go hero - Linear algebraSolving an ordinary differential equation; More advanced graphics; Visualising a three-dimensional surface; Typesetting mathematical expressions; A practical example: analysing experimental data; Time for action - fitting the standard curve; What just happened?; Time for action - plotting experimental data; What just happened?; Time for action - fitting a growth model; What just happened?; Summary; 2. Installing Sage; Before you begin; Installing a binary version of Sage on Windows; Downloading VMware Player; Installing VMWare Player; Downloading and extracting Sage

Launching the virtual machineStart Sage; Installing a binary version of Sage on OS X; Downloading Sage; Installing Sage; Starting Sage; Installing a binary version of Sage on GNU/Linux; Downloading and decompressing Sage; Running Sage from your user account; Installing for multiple users; Building Sage from source; Prerequisites; Downloading and decompressing source tarball; Building Sage; Installation; Summary; 3. Getting Started with Sage; How to get help with Sage; Starting Sage from the command line; Using the interactive shell; Time for action - doing calculations on the command line What just happened?Getting help; Command history; Tab completion; Interactively tracing execution; Using the notebook interface; Starting the notebook interface; Time for action - doing calculations with the notebook interface; What just happened?; Getting help in the notebook interface; Working with cells; Working with code; Closing the notebook interface; Have a go hero - using the notebook interface; Displaying results of calculations; Operators and variables; Arithmetic operators; Pop quiz - working with operators; Numerical types; Integers and rational numbers; Real numbers
Complex numbersSymbolic expressions; Defining variables on rings; Combining types in expressions; Pop quiz - understanding types; Strings; Time for action - using strings; What just happened?; Callable symbolic expressions; Time for action - defining callable symbolic expressions; What just happened?; Automatically typesetting expressions; Functions; Time for action - calling functions; What just happened?; Have a go hero - make some more plots; Built-in functions; Numerical approximations; The reset and restore functions; Defining your own functions
Time for action - defining and using your own functions

Sommario/riassunto

Unlock the full potential of Sage for simplifying and automating mathematical computing
