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	Titolo	Functional Programming in R 4 : Advanced Statistical Programming for Data Science, Analysis, and Finance / / by Thomas Mailund
	Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2023
	ISBN	9781484294871
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	Edizione	[2nd ed. 2023.]
	Descrizione fisica	1 online resource (166 pages)
	Disciplina	005.11
	Soggetti	Compilers (Computer programs)
		Computer programming
		Software engineering
		Compilers and Interpreters
		Programming Techniques
		Software Engineering
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Includes index.
	Sommario/riassunto	Master functions and discover how to write functional programs in R. In this book, updated for R 4, you'll learn to make your functions pure by avoiding side effects, write functions that manipulate other functions, and construct complex functions using simpler functions as building blocks. In Functional Programming in R 4, you'll see how to replace loops, which can have side-effects, with recursive functions that can more easily avoid them. In addition, the book covers why you shouldn't use recursion when loops are more efficient and how you can get the best of both worlds. Functional programming is a style of programming, like object-oriented programming, but one that focuses on data transformations and calculations rather than objects and state. Where in object-oriented programming you model your programs by describing which states an object can be in and how methods will reveal or modify that state, in functional programming you model programs by describing how functions translate input data to output data. Functions themselves are considered to be data you can

manipulate and much of the strength of functional programming comes from manipulating functions; that is, building more complex functions by combining simpler functions. You will: Write functions in R 4, including infix operators and replacement functions Create higher order functions Pass functions to other functions and start using functions as data you can manipulate Use Filer, Map and Reduce functions to express the intent behind code clearly and safely Build new functions from existing functions without necessarily writing any new functions, using point-free programming Create functions that carry data along with them.