

Dynamic Documents with R and knitr

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Literate Programming

- Literate programming, conceived by Don Knuth, is a programming paradigm that combines numeric output with documentation.
- Literate programming can be implemented via markup language (HTML, \LaTeX , Markdown, etc.), which describes the logic and output of a program written in a general-purpose language (C++, Python, Perl, etc.). The program code is embedded within the markup language in a text file. This file can then be compiled into a variety of different formats (.pdf, web pages, slideshows, etc.) for visual display.
- Today I'll demonstrate one implementation of literate programming, using \LaTeX as our markup language to describe programs written in R. **knitr**, an R package written by Yihui Xie, is used in the translation/compilation of code.

L^AT_EX

R

knitr