R version 4.0.3 (2020-10-10) -- "Bunny-Wunnies Freak Out"

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Platform: x86\_64-pc-linux-gnu (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.

You are welcome to redistribute it under certain conditions.

Type 'license()' or 'licence()' for distribution details.

R is a collaborative project with many contributors.

Type 'contributors()' for more information and

'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or

'help.start()' for an HTML browser interface to help.

Type 'q()' to quit R.

###########################################################################################

Welcome to RStudio IDE!

Your working directory is set to '/resources/rstudio'. We recommend you to use

'resources/data' to store your data that will be available in Skills Network Labs

components, such as Jupyter Notebook.

####################################################################################

R is a project which is attempting to provide a modern piece of

statistical software for the GNU suite of software.

The current R is the result of a collaborative effort with

contributions from all over the world.

Authors of R.

R was initially written by Robert Gentleman and Ross Ihaka—also known as "R & R"

of the Statistics Department of the University of Auckland.

Since mid-1997 there has been a core group with write access to the R

source, currently consisting of

Douglas Bates

John Chambers

Peter Dalgaard

Robert Gentleman

Kurt Hornik

Ross Ihaka

Tomas Kalibera

Michael Lawrence

Friedrich Leisch

Uwe Ligges

Thomas Lumley

Martin Maechler

Martin Morgan

Paul Murrell

Martyn Plummer

Brian Ripley

Deepayan Sarkar

Duncan Temple Lang

Luke Tierney

Simon Urbanek

plus Heiner Schwarte up to October 1999, Guido Masarotto up to June 2003,

Stefano Iacus up to July 2014, Seth Falcon up to August 2015 and Duncan Murdoch

up to September 2017.

Current R-core members can be contacted via email to R-project.org

with name made up by replacing spaces by dots in the name listed above.

(The authors of code from other projects included in the R distribution

are listed in the COPYRIGHTS file.)

R would not be what it is today without the invaluable help of these

people outside of the (former and current) R Core team, who

contributed by donating code, bug fixes and documentation:

Valerio Aimale, Suharto Anggono, Thomas Baier, Gabe Becker, Henrik

Bengtsson, Roger Bivand, Ben Bolker, David Brahm, G"oran Brostr"om,

Patrick Burns, Vince Carey, Saikat DebRoy, Matt Dowle, Brian D'Urso,

Lyndon Drake, Dirk Eddelbuettel, Claus Ekstrom, Sebastian

Fischmeister, John Fox, Paul Gilbert, Yu Gong, Gabor Grothendieck,

Frank E Harrell Jr, Peter M. Haverty, Torsten Hothorn, Robert King,

Kjetil Kjernsmo, Roger Koenker, Philippe Lambert, Jan de Leeuw, Jim

Lindsey, Patrick Lindsey, Catherine Loader, Gordon Maclean, Arni

Magnusson, John Maindonald, David Meyer, Ei-ji Nakama, Jens

Oehlschl"agel, Steve Oncley, Richard O'Keefe, Hubert Palme, Roger

D. Peng, Jose' C. Pinheiro, Tony Plate, Anthony Rossini, Jonathan

Rougier, Petr Savicky, Guenther Sawitzki, Marc Schwartz, Arun

Srinivasan, Detlef Steuer, Bill Simpson, Gordon Smyth, Adrian

Trapletti, Terry Therneau, Rolf Turner, Bill Venables, Gregory

R. Warnes, Andreas Weingessel, Morten Welinder, James Wettenhall,

Simon Wood, and Achim Zeileis.

Others have written code that has been adopted by R and is

acknowledged in the code files, including

J. D. Beasley, David J. Best, Richard Brent, Kevin Buhr, Michael

A. Covington, Bill Cleveland, Robert Cleveland,, G. W. Cran,

C. G. Ding, Ulrich Drepper, Paul Eggert, J. O. Evans, David M. Gay,

H. Frick, G. W. Hill, Richard H. Jones, Eric Grosse, Shelby Haberman,

Bruno Haible, John Hartigan, Andrew Harvey, Trevor Hastie, Min Long

Lam, George Marsaglia, K. J. Martin, Gordon Matzigkeit,

C. R. Mckenzie, Jean McRae, Cyrus Mehta, Fionn Murtagh, John C. Nash,

Finbarr O'Sullivan, R. E. Odeh, William Patefield, Nitin Patel, Alan

Richardson, D. E. Roberts, Patrick Royston, Russell Lenth, Ming-Jen

Shyu, Richard C. Singleton, S. G. Springer, Supoj Sutanthavibul, Irma

Terpenning, G. E. Thomas, Rob Tibshirani, Wai Wan Tsang, Berwin

Turlach, Gary V. Vaughan, Michael Wichura, Jingbo Wang, M. A. Wong,

and the Free Software Foundation (for autoconf code and utilities).

See also files under src/extras.

Many more, too numerous to mention here, have contributed by sending bug

reports and suggesting various improvements.

Simon Davies whilst at the University of Auckland wrote the original

version of glm().

Julian Harris and Wing Kwong (Tiki) Wan whilst at the University of

Auckland assisted Ross Ihaka with the original Macintosh port.

R was inspired by the S environment which has been principally

developed by John Chambers, with substantial input from Douglas Bates,

Rick Becker, Bill Cleveland, Trevor Hastie, Daryl Pregibon and

Allan Wilks.

A special debt is owed to John Chambers who has graciously contributed

advice and encouragement in the early days of R and later became a

member of the core team.

Stefano Iacus (a former member of R Core) and Simon Urbanek developed

the macOS port, including the R.app GUI, toolchains and packaging.

The Windows port was developed by Guido Masarotto (for a while a

member of R Core) and Brian Ripley, then Duncan Murdoch (a former

member of R Core) and currently by Jeroen Ooms (base) and Uwe Ligges

(packages).

Tomas Kalibera's work has been sponsored by Jan Vitek and funded by

his European Research Council grant "Evolving Language Ecosystems

(ELE)".

Computing support (including hardware, hosting and infrastructure) has

been provided/funded by the R Foundation, employers of R-Core members

(notably WU Wien, ETH Zurich, U Oxford and U Iowa) and by Northeastern

University and the University of Kent.

Distributions of R contain the recommended packages, whose

authors/contributors are listed in their DESCRIPTION files.

####################################################################

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citation()

To cite R in publications use:

R Core Team (2020). R: A language and

environment for statistical computing. R

Foundation for Statistical Computing,

Vienna, Austria. URL

https://www.R-project.org/.

A BibTeX entry for LaTeX users is

@Manual{,

title = {R: A Language and Environment for Statistical Computing},

author = {{R Core Team}},

organization = {R Foundation for Statistical Computing},

address = {Vienna, Austria},

year = {2020},

url = {https://www.R-project.org/},

}

We have invested a lot of time and effort in

creating R, please cite it when using it for

data analysis. See also

'citation("pkgname")' for citing R packages.

> citation("pkgname")

Error in citation("pkgname") : there is no package called 'pkgname'