

Abstract

In the process of learning programming, utilizing well-organized cheatsheets is a valuable technique. This "Data Import/Export in R" cheatsheet offers a quick reference guide for efficiently handling different file types in R. It covers importing and exporting CSV, TXT, XLS, XLSX, TSV, RDS, RDA, JSON, XML, images (JPG/PNG/TIFF/BMP), audio (MP3), video (MP4), HDF5, and netCDF files. Each slide provides concise R code for reading and writing specific file formats. This cheatsheet aims to empower learners with the necessary knowledge to manipulate and analyze diverse datasets effectively using R's data import/export capabilities..

Introduction

R is a powerful programming language for data analysis.

Efficient data import/export is crucial for data manipulation and analysis.

This cheatsheet provides quick reference on reading/writing various file types in R.

Conclusion

Proper data import/export enhances R's data analysis capabilities.

Use this cheatsheet as a handy reference guide in your R programming journey.

Thank You

Thank you for using this "Data Import/Export in R" cheatsheet.

For more resources, visit my website[<https://vccv.cc>].

CSV

Import	Export
<code>read.csv(file, header = TRUE, sep = " ", comment.char = " ", ...)</code>	<code>write.csv(x, file = " ", append = FALSE, sep = " ", row.names = TRUE, ...)</code>

File:	X:
the name of the file which the data are to be read from.	the object to be written, preferably a matrix or data frame.

TXT

Import	Export
<code>read.table(file, header = TRUE, sep = " ", comment.char = " ", ...)</code>	<code>write.table(x, file = " ", append = FALSE, sep = " ", row.names = TRUE, ...)</code>

File:	X:
the name of the file which the data are to be read from.	the object to be written, preferably a matrix or data frame.

Code: <code>read.table(file, header=TRUE)</code>	Code: <code>write.table(x, export.txt)</code>
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Video/HDF5/netCDF

Video	HDF5
Read Video: <code>videoplayback :: readMP4()</code>	Read HDF5: <code>hdf5read()</code>
Write Video: <code>videoplayback :: writeMP4()</code>	Write HDF5: <code>hdf5write()</code>
netCDF	
Read netCDF: <code>ncdf4::nc_open()</code>	Write netCDF: <code>ncdf4::nc_var_put()</code>

TSV/RDS/RDA

TSV	RDS	RDA
Read TSV: <code>read.table()</code>	Read RDS: <code>readRDS()</code>	Read RDA: <code>attach()</code>
Write TSV: <code>write.table()</code>	Write RDS: <code>saveRDS()</code>	

JSON/XML

JSON	XML
Read JSON: <code>jsonlite::fromJSON()</code>	Read XML: <code>XML::xmlParse()</code>
Write JSON: <code>jsonlite::toJSON()</code>	Write XML: <code>XML::xml()</code>

XLS/XLSX

XLS	XLSX
Read XLS: <code>readxl::read_excel()</code>	Read XLSX: <code>read_xlsx()</code>
Write XLS: <code>writexl::write_xlsx()</code>	Write XLSX: <code>write_xls()</code>

Image/Audio

Image	Audio
Read Images: <code>jpeg::readJPEG(), png::readPNG(), tiff::readTIFF(), bmp::readBMP()</code>	Read Audio: <code>tuneR::readMP3()</code>

Write Images	Write Audio
Write Images: <code>jpeg::writeJPEG(), png::writePNG(), tiff::writeTIFF(), bmp::writeBMP()</code>	Write Audio: <code>tuneR::writeMP3()</code>