

Save Text to File, Read Text from File, Replace Text in File

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1 Text to File

Go to the [RMD](#), [R](#), [PDF](#), or [HTML](#) version of this file. Go back to [fan's REconTools Package](#), [R Code Examples](#) Repository ([bookdown site](#)), or [Intro Stats with R](#) Repository ([bookdown site](#)).

1.1 Latex Table to File

Tabular outputs, text outputs, etc are saved as variables, which could be printed in console. They can also be saved to file for future re-used. For example, latex outputs need to be saved to file.

```
# Load Data
dt <- mtcars[1:4, 1:6]
# Generate latex string variable
st_out_tex <- kable(dt, "latex")
print(st_out_tex)
# File out
# fileConn <- file("../_file/tex/tex_sample_a_tab.tex")
fileConn <- file("_file/tex/tex_sample_a_tab.tex")
writeLines(st_out_tex, fileConn)
close(fileConn)
```

1.2 Create a Text File from Strings

```
st_file <- "\\documentclass[12pt,english]{article}
\\usepackage[bottom]{footmisc}
\\usepackage[urlcolor=blue]{hyperref}
\\begin{document}
\\title{A Latex Testing File}
\\author{\\href{http://fanwangecon.github.io/}{Fan Wang} \\thanks{See information \\href{https://fanwang}
\\maketitle
Ipsum information dolor sit amet, consectetur adipiscing elit. Integer Latex placerat nunc orci.
\\paragraph{\\href{https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3140132}{Data}}
Village closure information is taken from a village head survey.\\footnote{Generally students went to s
output:
```

```

pdf_document:
  pandoc_args: '...//...//_output_kniti_pdf.yaml'
  includes:
    in_header: '...//...//preamble.tex'
html_document:
  toc: true
  number_sections: true
  toc_float:
    collapsed: false
    smooth_scroll: false
    toc_depth: 3
  pandoc_args: '...//...//_output_kniti_html.yaml'
  includes:
    in_header: '...//...//hdga.html'
\\end{document}"

print(st_file)

```

```

## [1] "\\documentclass[12pt,english]{article}\\n\\usepackage[bottom]{footmisc}\\n\\usepackage[urlcolor=blue]{hyperref}\\n\\begin{document}\\n\\title{A Latex Testing File}\\n\\author{\\href{http://fanwangecon.github.io/}{Fan Wang} \\thanks{See information \\href{https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3140132}{Data}}}\\n\\maketitle\\n\\text{Ipsum information dolor sit amet, consectetur adipiscing elit. Integer Latex placerat nunc orci.}\\n\\text{Village closure information is taken from a village head survey.}\\n\\footnote{Generally students v}\\n\\end{document}"

fl_test_tex <- "_file/tex/test_fan.tex"
fileConn <- file(fl_test_tex)
writeLines(st_file, fileConn)
close(fileConn)

```

1.3 Open A File and Read Lines

Open and Replace Text in File:

```

fileConn <- file(fl_test_tex, "r")
st_file_read <- readLines(fileConn)
print(st_file_read)

```

```

## [1] "\\documentclass[12pt,english]{article}"
## [2] "\\usepackage[bottom]{footmisc}"
## [3] "\\usepackage[urlcolor=blue]{hyperref}"
## [4] "\\begin{document}"
## [5] "\\title{A Latex Testing File}"
## [6] "\\author{\\href{http://fanwangecon.github.io/}{Fan Wang} \\thanks{See information \\href{https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3140132}{Data}}}"
## [7] "\\maketitle"
## [8] "Ipsum information dolor sit amet, consectetur adipiscing elit. Integer Latex placerat nunc orci."
## [9] "\\text{Village closure information is taken from a village head survey.}\\n\\footnote{Generally students v}"
## [10] "\\end{document}"
## [11] "output:"
## [12] "  pdf_document:"
## [13] "    pandoc_args: '...//...//_output_kniti_pdf.yaml'"
## [14] "    includes:"
## [15] "      in_header: '...//...//preamble.tex'"
## [16] "  html_document:"
## [17] "    toc: true"
## [18] "    number_sections: true"
## [19] "    toc_float:"
## [20] "      collapsed: false"
## [21] "      smooth_scroll: false"
## [22] "      toc_depth: 3"

```

```
## [23] "    pandoc_args: '../.../_output_kniti_html.yaml'"
## [24] "    includes:"
## [25] "    in_header: '../.../hdga.html'"
## [26] "\\end{document}"
```

```
close(fileConn)
```

1.4 Open a File and Replace Some Lines

Append additional strings into the file after *html_document* with proper spacings:

```
# Read in Lines from existing file
fileConn <- file(fl_test_tex, "r")
st_file_read <- readLines(fileConn)
close(fileConn)
```

```
# Search and Replace String
st_search <- "html_document:
  toc: true
  number_sections: true
  toc_float:
    collapsed: false
    smooth_scroll: false
    toc_depth: 3"
st_replace <- paste0("html_document:
  toc: true
  number_sections: true
  toc_float:
    collapsed: false
    smooth_scroll: false
    toc_depth: 3\\r\\n",
    "    toc: true\\r\\n",
    "    number_sections: true\\r\\n",
    "    toc_float:\\r\\n",
    "    collapsed: false\\r\\n",
    "    smooth_scroll: false\\r\\n",
    "    toc_depth: 3")
```

```
# Search and Replace
st_file_updated <- gsub(x = st_file_read,
  pattern = st_search,
  replacement = st_replace)
```

```
# Print
print(st_file_updated)
```

```
## [1] "\\documentclass[12pt,english]{article}"
## [2] "\\usepackage[bottom]{footmisc}"
## [3] "\\usepackage[urlcolor=blue]{hyperref}"
## [4] "\\begin{document}"
## [5] "\\title{A Latex Testing File}"
## [6] "\\author{\\href{http://fanwangecon.github.io/}{Fan Wang} \\thanks{See information \\href{https
## [7] "\\maketitle}"
## [8] "Ipsum information dolor sit amet, consectetur adipiscing elit. Integer Latex placerat nunc orci
## [9] "\\paragraph{\\href{https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3140132}{Data}}"
```

```

## [10] "Village closure information is taken from a village head survey.\\footnote{Generally students v
## [11] "output:"
## [12] "  pdf_document:"
## [13] "    pandoc_args: '../.../_output_kniti_pdf.yaml'"
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## [16] "  html_document:"
## [17] "    toc: true"
## [18] "    number_sections: true"
## [19] "    toc_float:"
## [20] "      collapsed: false"
## [21] "      smooth_scroll: false"
## [22] "      toc_depth: 3"
## [23] "    pandoc_args: '../.../_output_kniti_html.yaml'"
## [24] "    includes:"
## [25] "      in_header: '../.../hdga.html'"
## [26] "\\end{document}"

```

Save Updated File

```

fl_srcrep_tex <- "_file/tex/test_fan_search_replace.tex"
fileConn_sr <- file(fl_srcrep_tex)
writeLines(st_file_updated, fileConn_sr)
close(fileConn_sr)

```