

# Upping your R Markdown game

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# Tables

# Tables

- Tables are always a bit of a pain...
- By default, R Markdown prints out tables the same way R does, which is not that pretty
- Quick fix: `knitr::kable()`
- Another quick fix, especially for printing out the entire data frame is `DT::datatable()`

# Your turn

- Open `sd-burritos-tables.Rmd`, knit, and review the `datatable()` output
- Update this output such that
  - Only Location, Burrito, Reviewer, and overall rating are displayed
  - Only 5 observations are shown on each page
  - Searching functionality is turned off
  - Dropdown menu for how many observations to show is 5, 10, and 50
- The following two resources might be useful:
  - DataTables reference: <https://datatables.net/reference/option/>
  - dtable package reference: <https://rstudio.github.io/DT/>



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# Other table-making packages

We're not going to go through these in detail but they're good to have on your radar:

- kableExtra
- xtable
- stargazer
- pander
- tables
- ascii



# Bibliography and citation

# List references in YAML

references:

- id: Kaggle18  
title: Burritos in San Diego  
author:
  - family: Cole  
given: ScottURL: 'https://www.kaggle.com/srcole/burritos-in-san-diego'  
type: article  
issued:
  - year: 2018  
month: 1

# Use bibliography file

- You can specify a bibliography file using the `bibliography` field in the YAML
- This can be a .bib file, or take on a variety of other formats:

Format	File extension
MODS	.mods
BibLaTeX	.bib
BibTeX	.bibtex
RIS	.ris
EndNote	.enl
EndNote XML	.xml
ISI	.wos
MEDLINE	.medline
Copac	.copac
JSON citeproc	.json

Source: [http://rmarkdown.rstudio.com/authoring\\_bibliographies\\_and\\_citations.html](http://rmarkdown.rstudio.com/authoring_bibliographies_and_citations.html)





# Citation syntax

- Citations go inside square brackets and are separated by semicolons
- Each citation must have a key, composed of @ + the citation identifier from the database

# Your turn

- Add a reference to the `rmarkdown` package in the `bibliography.bib` file.
- Add a citation to it in the `sd-burritos-bibcit.Rmd` file.
- Knit the document to confirm the citation appears as expected.



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# Parametrized reports



# Parametrized reports

- Parameters are useful when you want to re-render the same report with distinct values for various key inputs, for example:
  - Running a report specific to a department or geographic region
  - Running a report that covers a specific period in time
  - Running multiple versions of a report for distinct sets of core assumptions
- Declare parameter name, type, and default value in the YAML
- Change parameter values by passing to the `rmarkdown::render` function

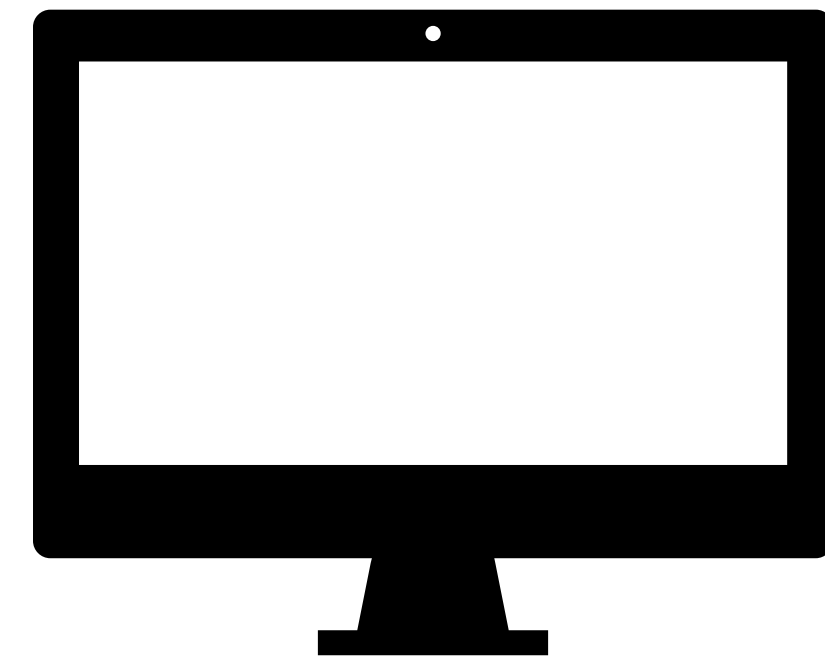
sd-burritos-parametrized.Rmd

OPTION 1

```
rmarkdown::render("sd-burritos-parametrized.Rmd",  
params = list(Reviewer = "Scott"))
```

OPTION 2

```
rmarkdown::render("sd-burritos-parametrized.Rmd",  
params = "ask"))
```



# DEMO



# Your turn

- Add another parameter to the YAML of `sd-burritos-parametrized.Rmd` to subset the data based on another attribute (e.g. burrito type or date reviewed).
- Make the appropriate adjustments to the R code in the document to take into account this new variable.
- Render the document with this parameter in place.

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