



R Markdown in 3 minutes

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- Authoring framework (based off markdown)
- Aides fully reproducible working (with code directly in the document)
- Easy to write notes, reports, papers, presentations (including this one) etc.
- Easier and more readable than LaTeX or HTML



Starting Off



- Use R Studio for ease
- File, New File, R Notebook

The screenshot shows the RStudio interface with an R Notebook. The left pane displays the source code, and the right pane shows the rendered output. The code defines a title, sets output to HTML, and includes R code to load the 'viridis' package and create a contour plot of the Maunga Whau volcano using the 'viridis' color palette. The rendered output shows the title 'Viridis Demo', a paragraph explaining the code, the title 'Viridis colors', and the resulting contour plot.

```
1. ---
2. title: "Viridis Demo"
3. output: html_document
4. ---
5.
6. ```{r include = FALSE}
7. library(viridis)
8. ```
9.
10. The code below demonstrates two color palettes in the
11. [viridis](https://github.com/sjmgarnier/viridis) package. Each
12. plot displays a contour map of the Maunga Whau volcano in
13. Auckland, New Zealand.
14.
15. 11
16. 12. ## Viridis colors
17. 13
18. 14. ```{r}
19. 15. image(volcano, col = viridis(200))
20. 16. ```
21. 17
22. 18. ## Magma colors
23. 19
24. 20. ```{r}
25. 21. image(volcano, col = viridis(200, option = "A"))
26. 22. ```
27. 23
```

Viridis Demo

The code below demonstrates two color palettes in the [viridis](https://github.com/sjmgarnier/viridis) package. Each plot displays a contour map of the Maunga Whau volcano in Auckland, New Zealand.

Viridis colors

`image(volcano, col = viridis(200))`

The plot shows a contour map of the Maunga Whau volcano. The x and y axes both range from 0.0 to 1.0. The color scale ranges from 0.0 (dark purple) to 1.0 (yellow). The plot shows a central peak (yellow) surrounded by a ring of lower elevation (green and blue), with the surrounding area being dark purple.

Magma colors

Not just for R



- Python, SQL, Bash, Rcpp, Stan, Javascript, CSS

The screenshot shows the RStudio interface with an R Markdown document titled "4-languages.Rmd". The document content is as follows:

```
1- ---
2 title: "Simple Language Demos"
3 output: html_document
4 ---
5
6 You can write code in languages other than R with R Markdown, e.g.
7
8 ## Bash
9
10 ```{bash}
11 ls *.Rmd
12 ```
13
14 ## Python
15
16 ```{python}
17 x = 'hello, python world!'
18 print(x.split(' '))
19 ```
20
21
```

The right-hand pane shows the rendered HTML output of the document. It features a title "Simple Language Demos", a paragraph "You can write code in languages other than R with R Markdown, e.g.", and two sections: "Bash" and "Python". The "Bash" section shows the output of the command `ls *.Rmd`, which lists four files: `1-example.Rmd`, `2-chunks.Rmd`, `3-inline.Rmd`, and `4-languages.Rmd`. The "Python" section shows the output of the Python code, which is `['hello,', 'python', 'world!']`.