Example

Milan Malfait, Ghent University

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1 R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.
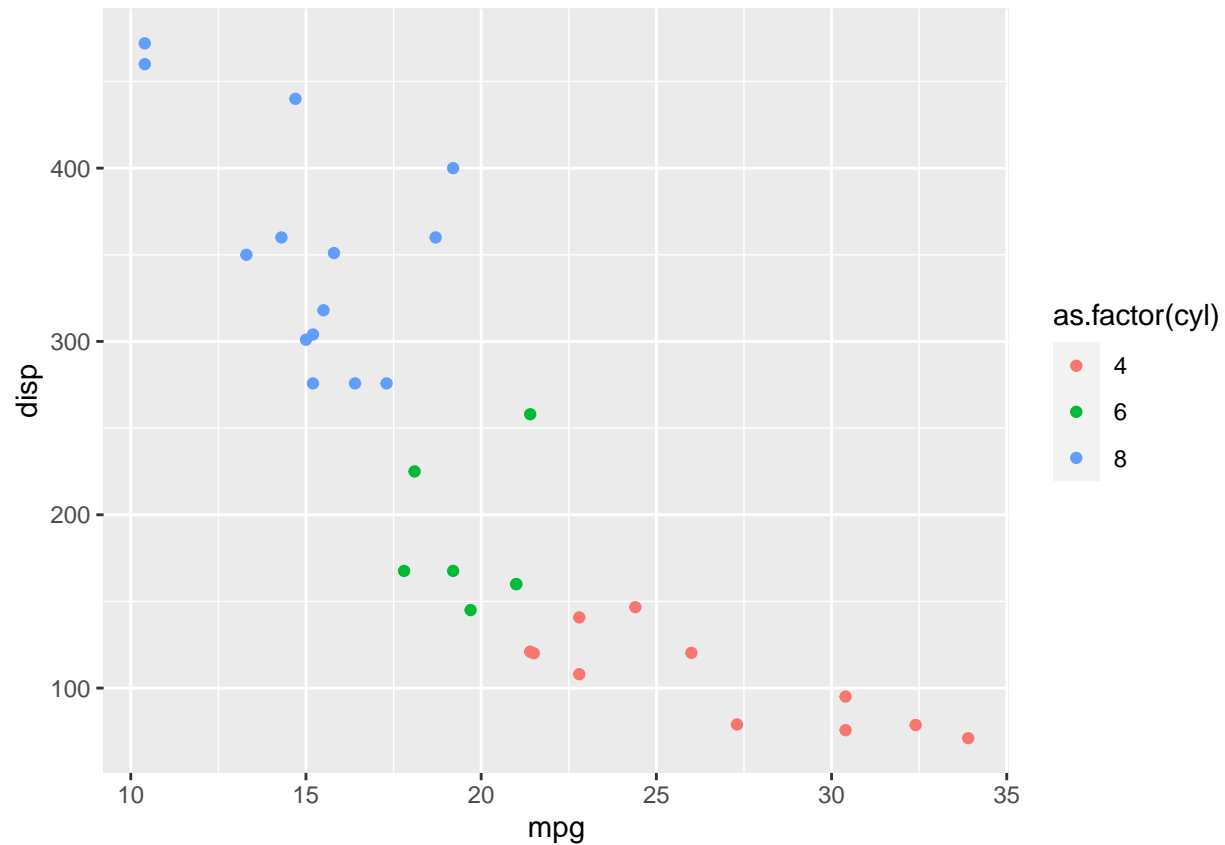
When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```r
summary(cars)
```

```
##      speed           dist
##  Min.   : 4.0   Min.   :  2.00
##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00
```

2 Including Plots

You can also embed plots, for example:

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

3 Caching

The GHA workflow maintains cached *knitr* results between subsequent runs to reduce runtime. Caching can be enabled by specifying `cache=TRUE` in the code chunk header.

Note that this should be used with caution, as caches may become invalid when code is changed, potentially leading to unsuspected results.

```
## Run with caching enabled
Sys.time()
```

```
## [1] "2021-11-09 08:36:41 UTC"
```

Session info

Session info

```
## [1] "2021-11-09 12:54:33 UTC"
```

```
## ─ Session info ─────────────────────────────────────────────────────────
##  hash: police officer: medium skin tone, broom, television
##
##  setting  value
##  version  R version 4.1.2 (2021-11-01)
##  os       macOS Catalina 10.15.7
##  system   x86_64, darwin17.0
##  ui       X11
##  language (EN)
##  collate  en_US.UTF-8
##  ctype    en_US.UTF-8
##  tz       UTC
##  date     2021-11-09
##  pandoc   2.7.3 @ /usr/local/bin/ (via rmarkdown)
##
## ─ Packages ─────────────────────────────────────────────────────────────
##  ! package     * version date (UTC) lib source
##  P cli           3.1.0   2021-10-27 [?] CRAN (R 4.1.0)
##  P colorspace    2.0-2   2021-06-24 [?] CRAN (R 4.1.0)
##  P crayon        1.4.1   2021-02-08 [?] CRAN (R 4.1.0)
##  P digest        0.6.27  2020-10-24 [?] CRAN (R 4.1.0)
##  P ellipsis      0.3.2   2021-04-29 [?] CRAN (R 4.1.0)
##  P evaluate      0.14    2019-05-28 [?] CRAN (R 4.1.0)
##  P fansi         0.5.0   2021-05-25 [?] CRAN (R 4.1.0)
##  P farver        2.1.0   2021-02-28 [?] CRAN (R 4.1.0)
##  P fastmap       1.1.0   2021-01-25 [?] CRAN (R 4.1.0)
##  P ggplot2     * 3.3.5   2021-06-25 [?] CRAN (R 4.1.0)
##  P glue          1.4.2   2020-08-27 [?] CRAN (R 4.1.0)
##  P gtable        0.3.0   2019-03-25 [?] CRAN (R 4.1.0)
##  P highr         0.9     2021-04-16 [?] CRAN (R 4.1.0)
##  P htmltools     0.5.2   2021-08-25 [?] CRAN (R 4.1.0)
##  P knitr         1.33    2021-04-24 [?] CRAN (R 4.1.0)
##  P labeling      0.4.2   2020-10-20 [?] CRAN (R 4.1.0)
##  P lifecycle     1.0.0   2021-02-15 [?] CRAN (R 4.1.0)
##  P magrittr      2.0.1   2020-11-17 [?] CRAN (R 4.1.0)
##  P munsell       0.5.0   2018-06-12 [?] CRAN (R 4.1.0)
##  P pillar        1.6.2   2021-07-29 [?] CRAN (R 4.1.2)
##  P pkgconfig     2.0.3   2021-11-09 [?] Github (r-lib/pkgconfig@b81ae03)
##  P R6            2.5.1   2021-08-19 [?] CRAN (R 4.1.0)
##  P renv          0.14.0  2021-07-21 [?] CRAN (R 4.1.0)
##  P rlang         0.4.11  2021-04-30 [?] CRAN (R 4.1.0)
##  P rmarkdown     2.10    2021-08-06 [?] CRAN (R 4.1.2)
##  P scales        1.1.1   2020-05-11 [?] CRAN (R 4.1.0)
##  P sessioninfo   1.2.1   2021-11-02 [?] CRAN (R 4.1.0)
##  P stringi       1.7.4   2021-08-25 [?] CRAN (R 4.1.2)
##  P stringr       1.4.0   2019-02-10 [?] CRAN (R 4.1.0)
##  P tibble        3.1.4   2021-08-25 [?] CRAN (R 4.1.2)
##  P utf8          1.2.2   2021-07-24 [?] CRAN (R 4.1.0)
##  P vctrs         0.3.8   2021-04-29 [?] CRAN (R 4.1.0)
##  P withr         2.4.2   2021-04-18 [?] CRAN (R 4.1.0)
##  P xfun          0.25    2021-08-06 [?] CRAN (R 4.1.2)
##  P yaml          2.2.1   2020-02-01 [?] CRAN (R 4.1.0)
##
##  [1] /Users/runner/work/singleCellCourse/singleCellCourse/renv/library/R-4.1/x86_64-apple-darwin17.0
```

```
##  [2] /private/var/folders/24/8k48jl6d249_n_qfxwsl6xvm0000gn/T/Rtmpa483oE/renv-system-library
##
##  P -- Loaded and on-disk path mismatch.
##
## -------------------------------------------------------------------------------
```