DEPARTMENT OF CLINICAL RESEARCH

Title

Subtitle

DCR project number: XXXX

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Contents

1 Section 1

You can use the usual '$' for mathematical expressions within a text $Y_t = a + bX + Y_1 + \epsilon$ or indent with '$$'

$$Y_t = a + bX + Y_1 + \epsilon$$

1.1 Subsection

Subsection: Use citations like I. Quartones [1] and Y. Quartini [2].

2 Table options

model	hp	mpg_c	mpg_h	msrp
458 Speciale	597	13	17	291744
458 Spider	562	13	17	263553
458 Italia	562	13	17	233509
488 GTB	661	15	22	245400
California	553	16	23	198973
GTC4Lusso	680	12	17	298000
FF	652	11	16	295000
F12Berlinetta	731	11	16	319995

Large Landmasses of the World

The top ten largest are presented

name	size
Asia	16988
Africa	11506
North America	9390
South America	6795
Antarctica	5500
Europe	3745
Australia	2968
Greenland	840
New Guinea	306
Borneo	280

Source: The World Almanac and Book of Facts, 1975, page 406.

Reference: McNeil, D. R. (1977) Interactive Data Analysis. Wiley.

3 Raw typst

For raw typst code you can use **typst chunks**. Raw typst coding might be useful in tables, because you can use R output in typst chunks:

```
value_1 <- 1
value_2 <- 2
value_3 <- 3
value_4 <- 4
```

Hypothesis	Group	Assumed value
Null hypothesis	Control arm	1
Null hypothesis	Experimental arm	2
Alternative hypothesis 1	Control arm	3
Alternative hypothesis 1	Combined dosage arms	4

3.1 Tinytable

The *tinytable* packages table allows typst-specific table layout, for example, colouring:

```
library(tidyverse)
library(tinytable)

output <- tibble(kpi=c(1,1,2,5), center=c("A", "B", "C", "D"))

output$kpi_ind <- NA
output$kpi_ind[output$kpi==1] <- 1
output$kpi_ind[output$kpi>1 & output$kpi<=2] <- 2
output$kpi_ind[output$kpi>2 & output$kpi<=4] <- 3
output$kpi_ind[output$kpi>4] <- 4

output$kpi_ind <- factor(output$kpi_ind, levels=1:4,
                         labels=c("#ff0000", "#ffa500", "#90ee90", "#32cd32"))

output_colours <- rep(as.character(output$kpi_ind), 1)

no_rows <- nrow(output)
colour_column <- ncol(output)-1

output <- output |> select(!kpi_ind) |> tt() |>
  format_tt(digits=2) |> style_tt(i=0, bold=T)

for (i in 1:nrow(output)) {

    output <- output |> style_tt(i = i,
                                 j = colour_column,
                                 background = output_colours[i],
                                 color = "black")


}

output
```

kpi	center
1	A
1	B
2	C
5	D

4 Revision history

Version	Date	Revision changes
0	Date	

5 Reproducibility

R packages used in the analysis:

```
options(width = 90)
sessionInfo()
```

```
R version 4.2.3 (2023-03-15)
Platform: x86_64-apple-darwin17.0 (64-bit)
Running under: macOS Big Sur ... 10.16

Matrix products: default
BLAS:   /Library/Frameworks/R.framework/Versions/4.2/Resources/lib/libRblas.0.dylib
LAPACK: /Library/Frameworks/R.framework/Versions/4.2/Resources/lib/libRlapack.dylib

locale:
[1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8

attached base packages:
[1] stats     graphics  grDevices utils     datasets  methods   base

other attached packages:
 [1] tinytable_0.5.0 lubridate_1.9.3 forcats_1.0.0   stringr_1.5.1   purrr_1.0.2
 [6] readr_2.1.5     tidyr_1.3.1     tibble_3.2.1    ggplot2_3.5.1   tidyverse_2.0.0
[11] dplyr_1.1.4     gt_0.11.1

loaded via a namespace (and not attached):
 [1] tidyselect_1.2.1  xfun_0.48         quarto_1.4.4      colorspace_2.1-1
 [5] vctrs_0.6.5       generics_0.1.3    htmltools_0.5.8.1 yaml_2.3.10
 [9] base64enc_0.1-3   utf8_1.2.4        rlang_1.1.4       pillar_1.9.0
[13] later_1.3.2       glue_1.8.0        withr_3.0.1       lifecycle_1.0.4
[17] munsell_0.5.1     commonmark_1.9.2  gtable_0.3.5      evaluate_1.0.1
[21] knitr_1.48        tzdb_0.4.0        fastmap_1.2.0     ps_1.8.0
[25] markdown_1.13     fansi_1.0.6       Rcpp_1.0.13       scales_1.3.0
[29] jsonlite_1.8.9    farver_2.1.2      hms_1.1.3         digest_0.6.37
[33] stringi_1.8.4     processx_3.8.4    grid_4.2.3        cli_3.6.3
[37] tools_4.2.3       magrittr_2.0.3    sass_0.4.9        pkgconfig_2.0.3
[41] xml2_1.3.6        timechange_0.3.0  rmarkdown_2.28    rstudioapi_0.17.0
[45] R6_2.5.1          compiler_4.2.3
```

Bibliography

[1] I. Quartones, “Quarto use is associated with best survival - A retrospective single person study,” *Quartelsevier*, 2021.

[2] Y. Quartini, “A life without Quarto? No way!.” Sprinquarto, 2022.