

Problem Set 0

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Exercises

1. Create an R script and add a line of code to the R script to print the sum of 3 and 8. Execute/Run this line of code.
2. R can be used as a simple calculator. In order to familiarize yourself with basic mathematic operations in R, calculate the multiplication, division, modulo, and exponentiation of the numbers 11 and 2. Add comments using `#` after every line to comment what the code does.
3. Assign the value 18 to variable/object `x`. Print out the value of the variable `x`.
4. Add 5 to `x`.
5. Create a new variable by assigning the addition `x + 5` to `y`. Print out `y`.
6. Create a variable `stockvalue` with the value 50. Create a variable `growth_multiplier` (that represents the annual growth) and set its value to 1.2. Calculate the stockvalue after 3 years by using `stockvalue` and `growth_multiplier` and save it as variable `result`. Print out the value of `result`.
7. To create a vector (of length > 1) in R, you place the vector elements separated by a comma between the parentheses of the combine function `c()`. Create a vector containing numbers 2, 3, 4 and 6 and assign it to `my_vector`.
8. Add 3 to the variable `my_vector` and figure out how R calculates this.
9. Extract the third element of `my_vector` by using square brackets behind the vector.
10. What do you need to do so that `my_vector` now stores the values `my_vector + 3` instead of the values previously assigned to it (i.e., 2, 3, 4, 6).

Session Info

```
sessionInfo()
```

```
## R version 4.2.2 (2022-10-31)
## Platform: aarch64-apple-darwin20 (64-bit)
## Running under: macOS Ventura 13.0
##
## Matrix products: default
## BLAS: /Library/Frameworks/R.framework/Versions/4.2-arm64/Resources/lib/libRblas.0.dylib
## LAPACK: /Library/Frameworks/R.framework/Versions/4.2-arm64/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
##
## loaded via a namespace (and not attached):
## [1] compiler_4.2.2  magrittr_2.0.3  fastmap_1.1.0   cli_3.4.1
## [5] tools_4.2.2     htmltools_0.5.5 rstudioapi_0.14  yaml_2.3.6
## [9] stringi_1.7.8   rmarkdown_2.25  knitr_1.40       stringr_1.4.1
## [13] xfun_0.40       digest_0.6.30   rlang_1.0.6     evaluate_0.17
```