

## What to do after installation of Julia and VS Code?

Assuming that you were able to install Julia and VSCode, here is what you could try to do next.

(1) Create a directory for the workshop

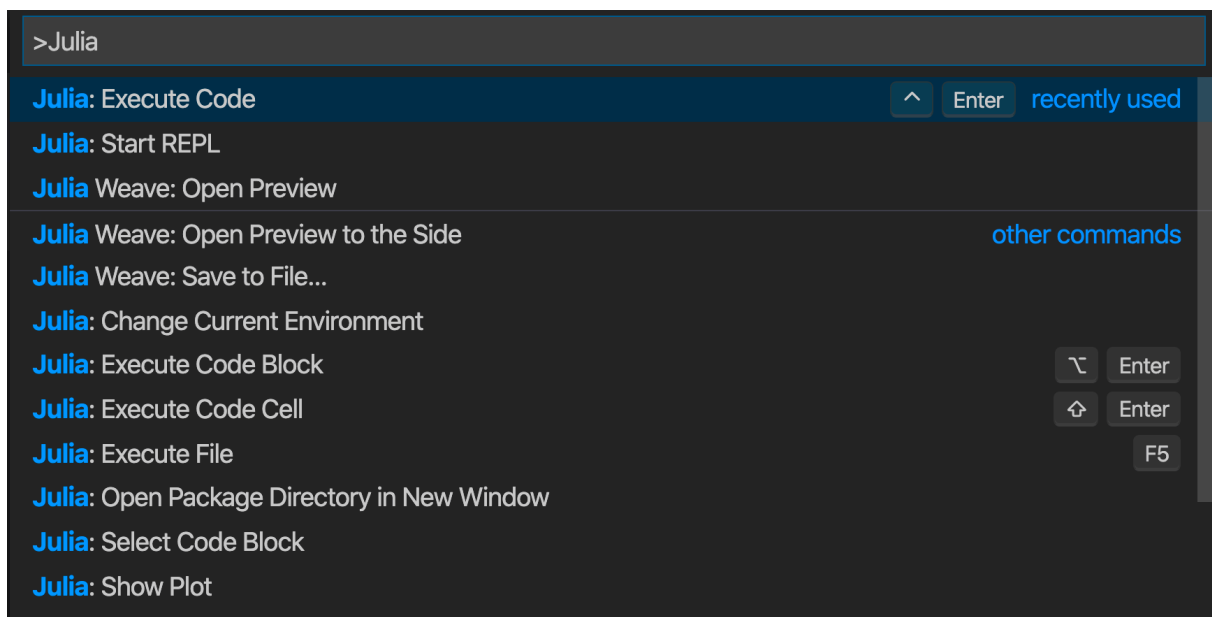
(2) Copy the two attached files in this directory (MRK17\_Exp1\_rk01.jmd, MRK17\_Exp1\_xtra.csv)

(3) Start VSCode

(4) File > Open MRK17\_Exp1\_rk01.jmd

# This is a julia markdown file. We use such scripts to weave HTML / PDF reports of the analyses.

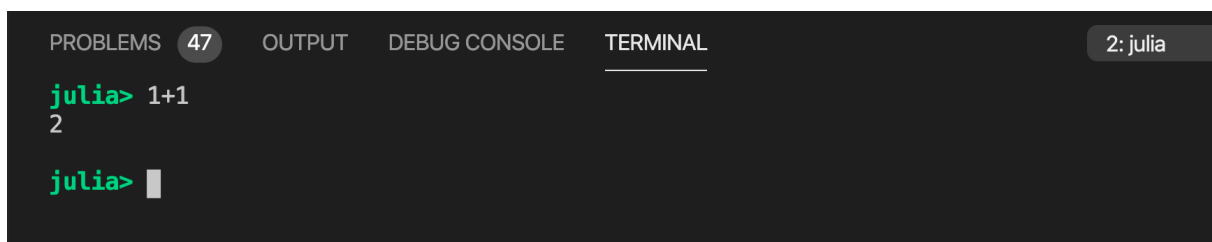
(5) **Cmd-Shift-P** (MacOS) or **Cntrl-Shift-P** (Windows) opens a panel with commands (see screen shot). This is probably the most useful command when you start out with the VSCode IDE. Enter Julia in search field:



If Julia commands don't show up you need to install the Julia Extension for VSCode. In this case see (10) below or come back to me. In principle, the Julia Extension should be pre-installed globally. Above are some of the Julia commands available. You can always select them from here until you know or define your own key shortcuts.

(6) Select **Julia: Start REPL**

# This opens a terminal /shell with the **Julia>** prompt



This means that everything is fine. Now you can work interactively with Julia.

(7) This is a good place to add some user-contributed packages to your installation. Enter "I" to switch to **Pkg>** mode; return to **Julia>** mode with "backspace". Other modes are **R>**, **help?>**, **shell>**; see *TutorialSetup* for characters that allow you to switch between different modes.

```
julia> pwd()
"/Users/reinholdkligl/Google Drive/ZiF_CG_WS2/WS"

julia>

(v1.3) pkg> add Weave, CSV, MixedModels, DataFrames, RCall
  Updating registry at `~/.julia/registries/General`
  Updating git-repo `https://github.com/JuliaRegistries/General.git`
  Resolving package versions...
  Updating `~/.julia/environments/v1.3/Project.toml`
[no changes]
  Updating `~/.julia/environments/v1.3/Manifest.toml`
[no changes]
```

(8) Now you can also execute commands from a jmd file. Put the cursor at the beginning of a code line (or select several lines), use **Cmd-Shift-P** (MacOS) or **Cntrl-Shift-P** (Windows) to see commands, and select **Julia: Execute Code**. The output appears in the TERMINAL window. This works fine for all the commands in the file.

(9) You can also weave the entire markdown file into a HTML with the following two commands in the REPL.

```
julia> using Weave

julia> weave("MRK17_Exp1_rk00.jmd")
[ Info: Weaving chunk 1 from line 13
[ Info: Weaving chunk 2 from line 19
[ Info: Weaving chunk 3 from line 29
[ Info: Weaving chunk 4 from line 36
[ Info: Report weaved to MRK17_Exp1_rk00.html
"/Users/reinholdkligl/Google Drive/ZiF_CG_WS2/WS/MRK17_Exp1_rk00.html"
```

(10) VSCode offers extensions for many other programming languages. You get the view below left when you click at the bottom left icon (four squares with top right one flying away) and entering **Julia** in the search field. The extensions are installed. When an extension is not installed (e.g., most of MATLAB in this case), it looks like the bottom right screen.

