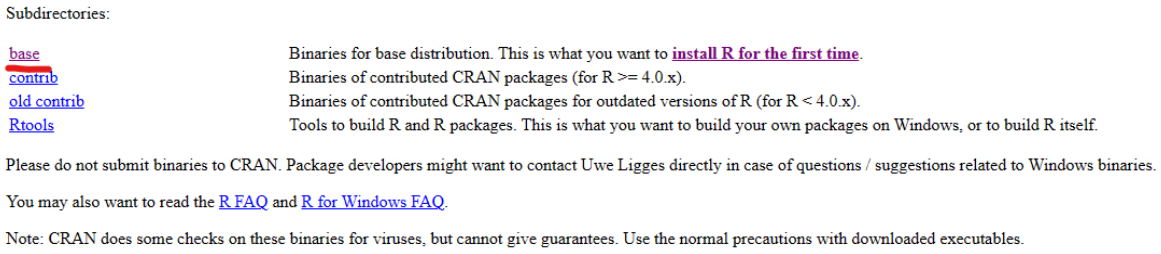
Introduction to RStudio

1. Install R and RStudio

- https://cran.r-project.org/
- Click on the link above and choose your OS. I'm using Windows for this part. (I hate it)
- Follow the instructions listed and download the correct file. For Windows, download the "base" file



Subdirectories:

base	Binaries for base distribution. This is what you want to **install R for the first time**.
contrib	Binaries of contributed CRAN packages (for R >= 4.0.x).
old contrib	Binaries of contributed CRAN packages for outdated versions of R (for R < 4.0.x).
Rtools	Tools to build R and R packages. This is what you want to build your own packages on Windows, or to build R itself.

Please do not submit binaries to CRAN. Package developers might want to contact Uwe Ligges directly in case of questions / suggestions related to Windows binaries.

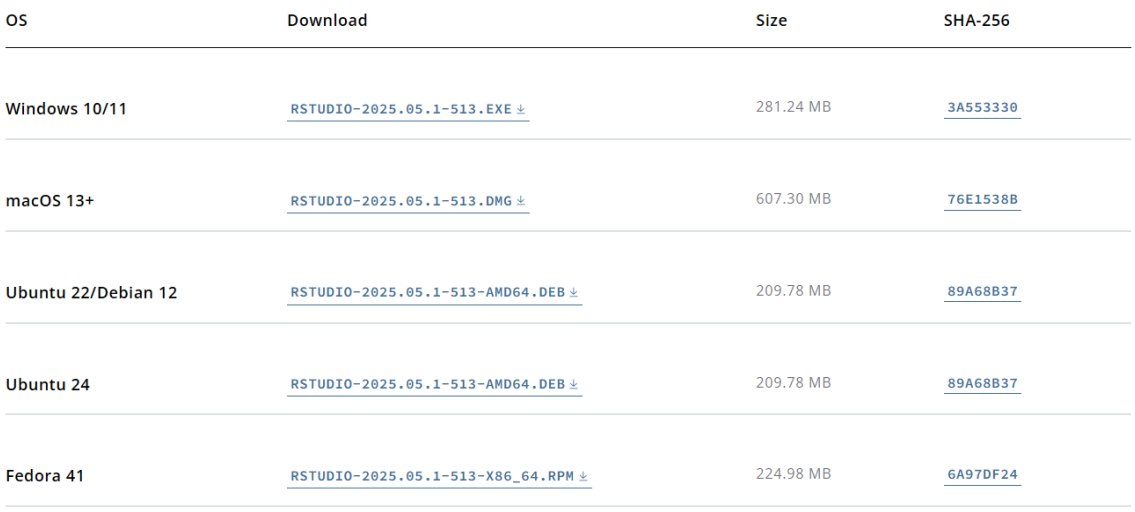
You may also want to read the R FAQ and R for Windows FAQ.

Note: CRAN does some checks on these binaries for viruses, but cannot give guarantees. Use the normal precautions with downloaded executables.

- Run the installer and keep everything default, you can change it later if you want

2. Install RStudio Desktop

- https://posit.co/download/rstudio-desktop/
- This is your IDE for R programming
- Again, find your own OS and download the correct file

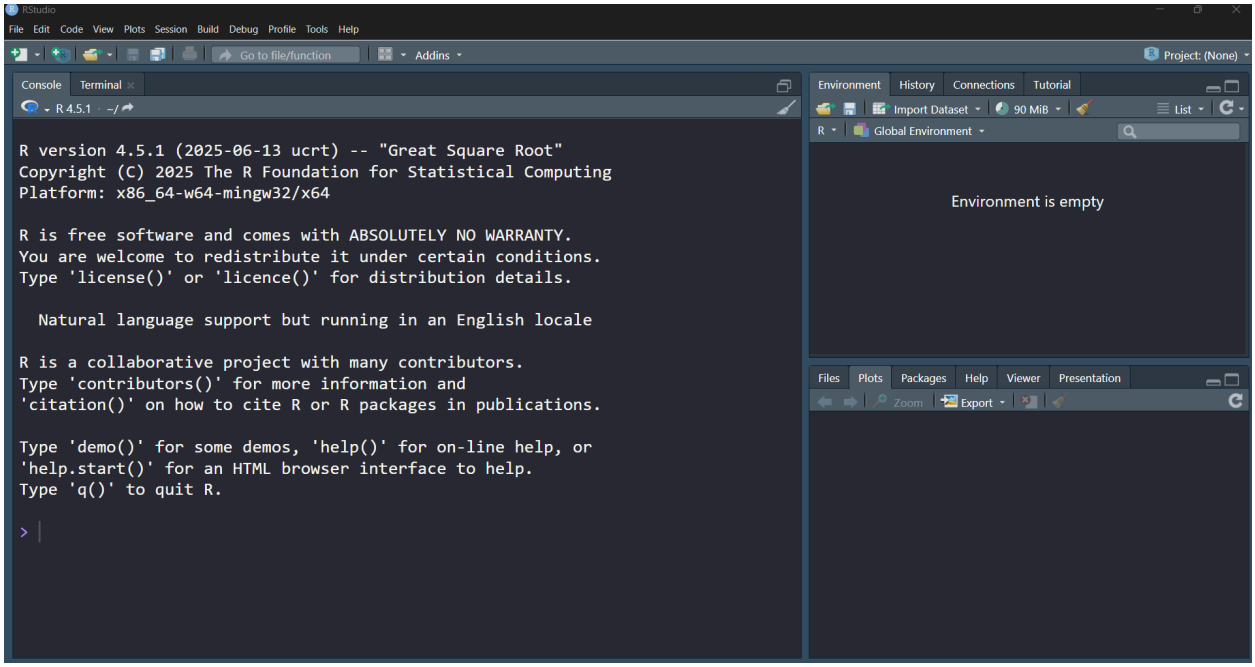


OS	Download	Size	SHA-256
Windows 10/11	RSTUDIO-2025.05.1-513.EXE	281.24 MB	3A553330
macOS 13+	RSTUDIO-2025.05.1-513.DMG	607.30 MB	76E1538B
Ubuntu 22/Debian 12	RSTUDIO-2025.05.1-513-AMD64.DEB	209.78 MB	89A68B37
Ubuntu 24	RSTUDIO-2025.05.1-513-AMD64.DEB	209.78 MB	89A68B37
Fedora 41	RSTUDIO-2025.05.1-513-X86_64.RPM	224.98 MB	6A97DF24

- Run the installer and keep everything default

RStudio Interface

- When you first launched into Rstudio, you will see the following (might be different colour):



- Don't worry if it is different from your professor's or friend's.
- The big panel from the left is your console, where you can execute your code line by line and see the output. Try "3 + 3" without the quotation.
- The next panel at the top right is your environment tab. In this course, we will probably only use the environment and the history tab. The environment tab is when you initialise a variable or a dataset or a spreadsheet or an object, which we will touch on later. History just includes your previous codes.
- The next panel at the bottom right is where you can see your plotted graph/chart. You will also see detailed explanations for commands of R. Try "?print" without the quotation
- Now, to see the 4th panel, you need to have a R script running. Either use an existing one, or create a new one. In our case, let's create a new R script.
- File > New File > R Script
- Now you will see your 4th panel, the script panel, where you can type and edit in.
- Your next question will probably be: What's the difference between this and the console?
- Well, the script panel allows you to store multiple lines of codes for your next session of use. Meanwhile the console is only for immediate usage, it does not store any codes under any circumstances.