Preparation for Applied Statistics for Linguistics

To install R, R Studio, and necessary data and packages to prepare for the workshop, you can follow this tutorial. The most basic introduction is included here with the installation instructions.

1. **R installation**

R is a programming language, mostly aimed towards doing statistics. It is free and open source. The community using R is very large and there are many resources for learning, but also message boards and forums where people post their questions and other users respond.

To install R, go to the link: https://cran.r-project.org/. At the top of the page you will find three links for installation for different operating systems. Choose the operating system you have, and follow the instructions. The installation is like installing any other software. When you follow the installation instructions, the R will be installed.

2. **R studio installation**

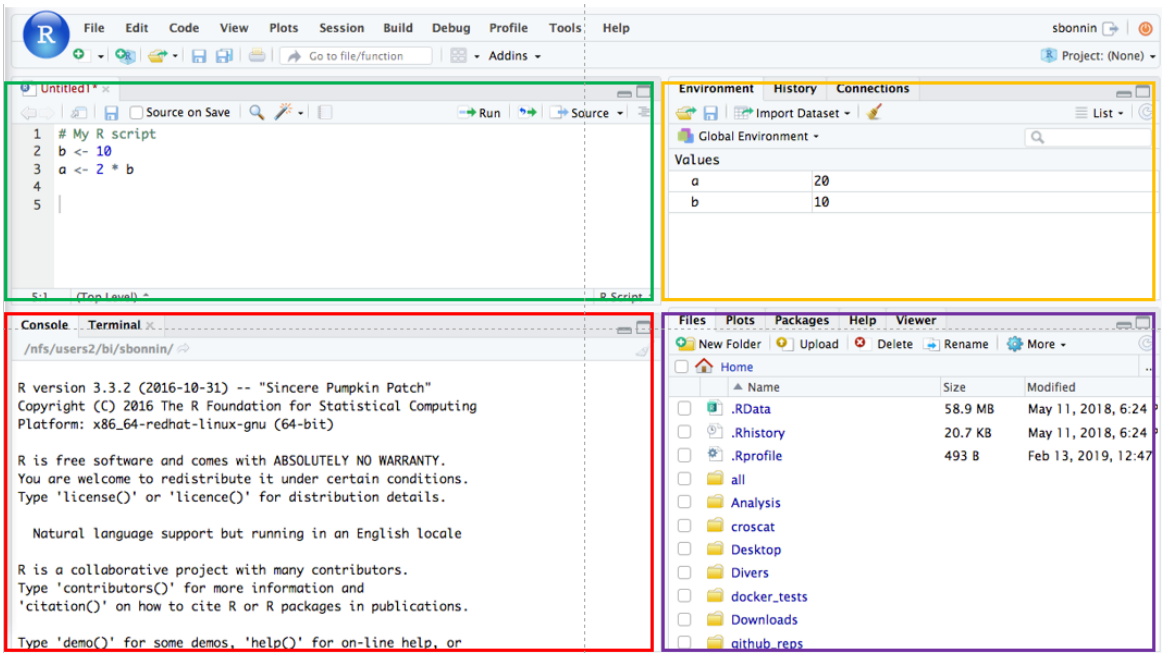
R studio is an interface for R language. It gives you more straightforward options for managing your code and projects. Although it is not the only way to do this, it is the most widespread way to use R and is also very convenient.

R studio can be downloaded from the link: https://posit.co/download/rstudio-desktop/. On the right side you will see the button to download R studio for your operating system. If it just offers Windows, you can scroll down and pick the installation file for your operating system. Similarly, follow the instructions, and the installation will go in the usual way.

3. **R studio introduction**

Here is the simplest introduction for R studio, just so you can install everything you need. More instructions will follow during the workshop.

When you open R studio, the first thing you see is this:



Red rectangle is the R itself. Whatever you write there will be the code that will be executed. However, it will not be saved anywhere.
Green rectangle is the scripter. It is just like any notepad. You can type there and save your code as a file.
Orange and purple rectangles are not relevant for installation, but the orange one allows you to see the files you loaded into the program on which you are currently working. Purple one is a multi-tab section where you can see the files on your computer, plots when you make them, and some other things.

4. **Installing packages**

A useful metaphor for packages is that R is your phone, and the packages are apps that you use on the phone. Some functions are available with just R, but in order not to code everything in detail, people prepared packages that do those things. For example, instead of writing the formula for drawing a plot, there is a package that does everything for you.
To install the necessary packages for the workshop, you just copy the following line of code and paste it in the red rectangle and hit enter/return to execute code.

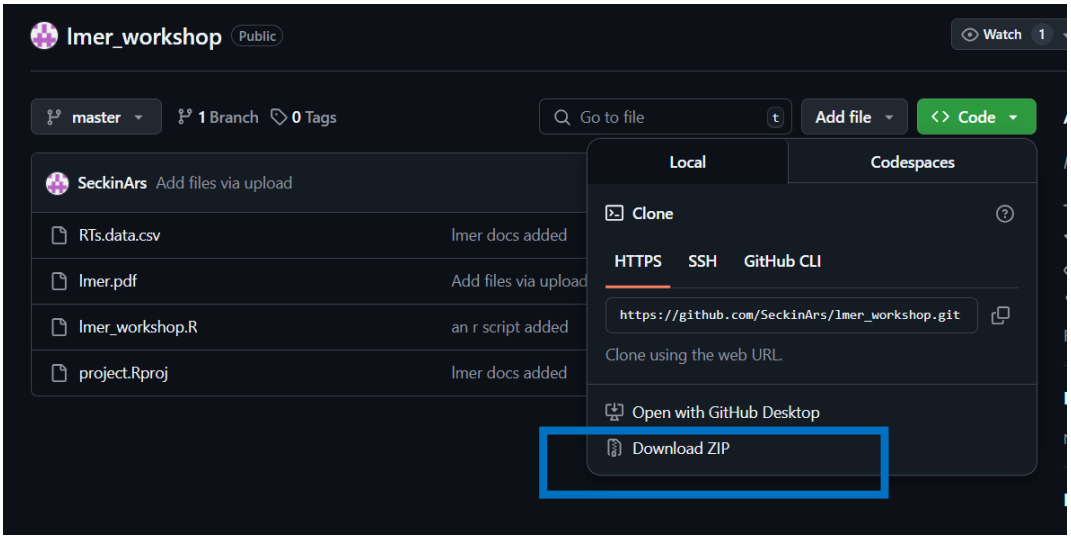
```
install.packages ("lme4", "multcomp", "reshape", "plyr", "ggplot2",
"lmerTest", "emmeans", "sjPlot", "sjmisc", "readxl", "tidyverse")
```

Once you run it, it will write out all sorts of text that you do not need to worry about now (and mostly won't need to worry about).

You successfully installed everything you need. Just one more step.

5. **Download the materials for the workshop**

Use these two links to download data:
https://github.com/SeckinArs/lmer_workshop
https://github.com/ksenijamisic/ASL1.
You will see a green button pictured below that says 'Code'. Press the button and the dropdown menu will show up. Select the option 'Download ZIP' (blue rectangle). Once downloaded you can unzip it in the usual way. Just remember where you saved it until the workshop 😊



You are finally done! See you in Novi Sad!