

Installing & Running the ‘Central Limit Theorem & Confidence Interval Simulation’ (shown during the lecture)

Carlo Knotz

9/18/2021

Step 1: Install R & RStudio

To be able to run the simulation on your own computer you need to install R and RStudio. Both are **open source** and **free**.

You can download R from <https://cran.uib.no/index.html> and RStudio from <https://www.rstudio.com/products/rstudio/download/>. Install the free Desktop version of RStudio.

If you like, you can also watch the following two videos that will guide you through the installation process:

- Install R: <https://vimeo.com/203516510>
- Install RStudio: <https://vimeo.com/203516968>

Step 2: Download the code file from *CANVAS*

The code for the simulation is contained in the `clt_sim_app.R` file, which you can download from the course page on *CANVAS*.

Download the file and save it somewhere where you can easily find it (e.g., the Desktop).

Step 3: Open RStudio & maintenance

Once you have installed both R and RStudio, open RStudio.

In RStudio, use the menu at the top to open the `clt_sim_app.R` file:

1. Go to **File**
2. Go to **Open file...**
3. Navigate to where you stored the `clt_sim_app.R` file and open it.

Step 4: Installing packages

Once you open the file in RStudio, a little banner will appear at the top warning you that some packages need to be installed. Click on **Install** to install these packages automatically.

Wait until the installation is complete.

Step 5: Run the simulation

If you look toward the menu bar in the upper part of your screen, you can see a button saying **Run App** (see also the image on the next page).

Click on this button to start the simulation. Ignore the orange warning messages in the bottom left window (yes, really). Feel free to look at the code, but do not change it (unless you happen to know what you are doing).

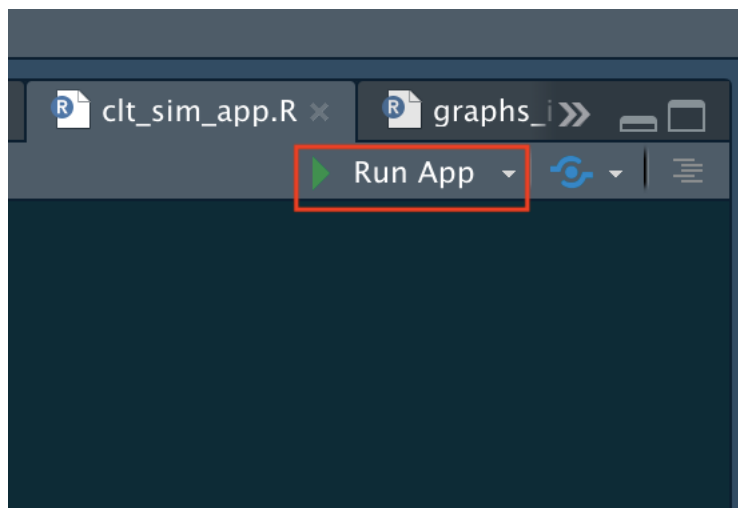


Figure 1: The button to start the simulation