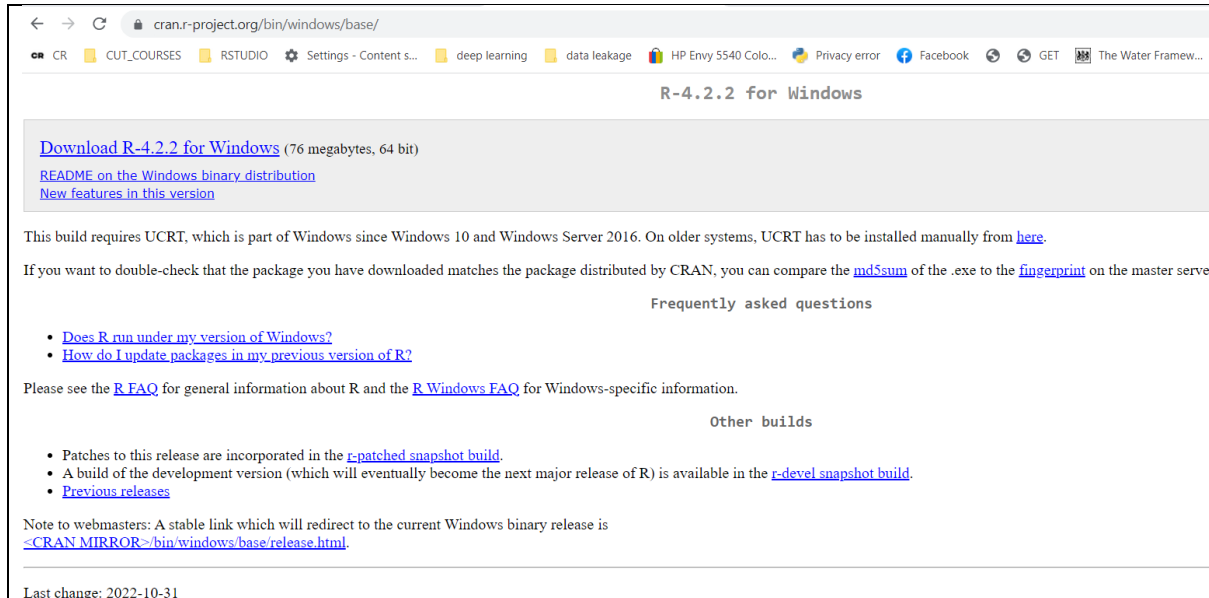


Tutorial for installing R and R-studio

Go to the following website:

<https://cran.r-project.org/bin/windows/base/>

and download the R-4.2.2 version (R-4.2.2-win.exe):



The screenshot shows the CRAN website page for R-4.2.2 for Windows. The page title is "R-4.2.2 for Windows". Below the title, there is a link to "Download R-4.2.2 for Windows (76 megabytes, 64 bit)". There are also links for "README on the Windows binary distribution" and "New features in this version". The main content area contains the following text:

This build requires UCRT, which is part of Windows since Windows 10 and Windows Server 2016. On older systems, UCRT has to be installed manually from [here](#).

If you want to double-check that the package you have downloaded matches the package distributed by CRAN, you can compare the [md5sum](#) of the .exe to the [fingerprint](#) on the master server.

Frequently asked questions

- [Does R run under my version of Windows?](#)
- [How do I update packages in my previous version of R?](#)

Please see the [R FAQ](#) for general information about R and the [R Windows FAQ](#) for Windows-specific information.

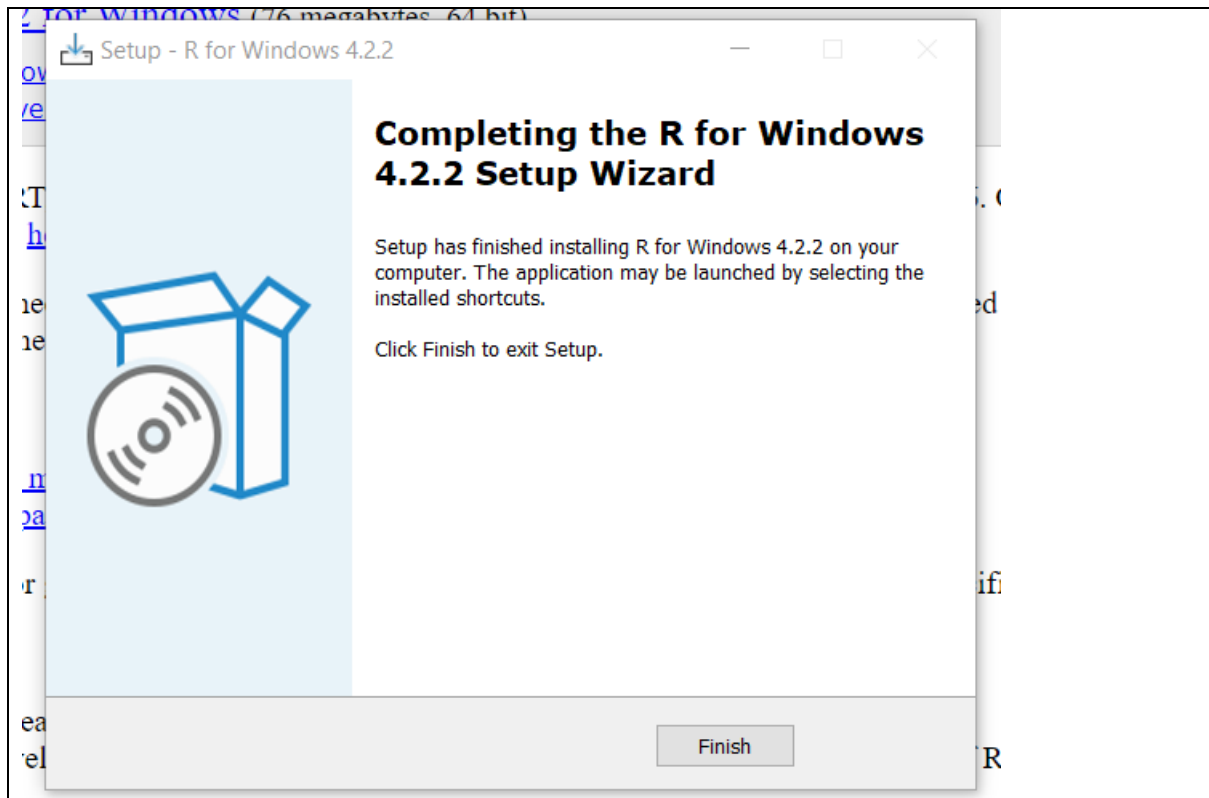
Other builds

- Patches to this release are incorporated in the [r-patched snapshot build](#).
- A build of the development version (which will eventually become the next major release of R) is available in the [r-devel snapshot build](#).
- [Previous releases](#)

Note to webmasters: A stable link which will redirect to the current Windows binary release is [<CRAN MIRROR>/bin/windows/base/release.html](#).

Last change: 2022-10-31

Follow the installation steps, and you should get the following image at the end of the process:



The screenshot shows the "Completing the R for Windows 4.2.2 Setup Wizard" window. The window title is "Setup - R for Windows 4.2.2". The main content area contains the following text:

Completing the R for Windows 4.2.2 Setup Wizard

Setup has finished installing R for Windows 4.2.2 on your computer. The application may be launched by selecting the installed shortcuts.

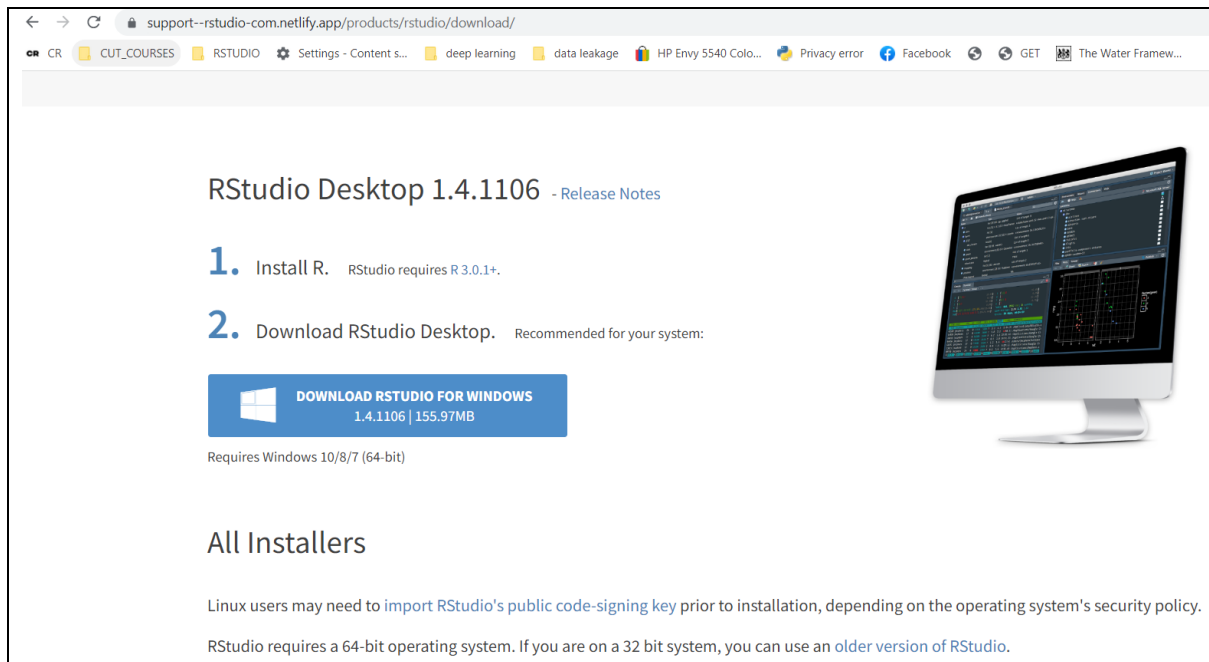
Click Finish to exit Setup.

At the bottom of the window, there is a "Finish" button.

Next, go to the following website:

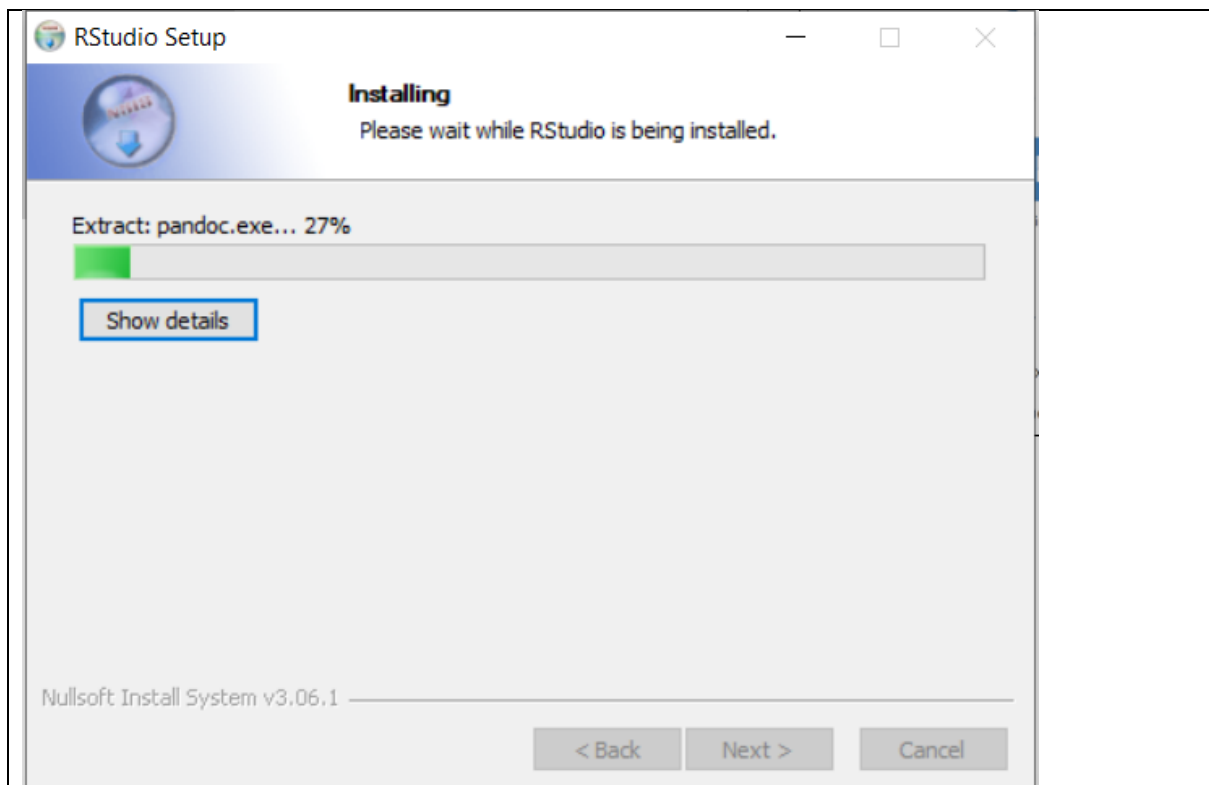
<https://support--rstudio-com.netlify.app/products/rstudio/download/>

and download the R-studio (be aware that most updated version might be available):

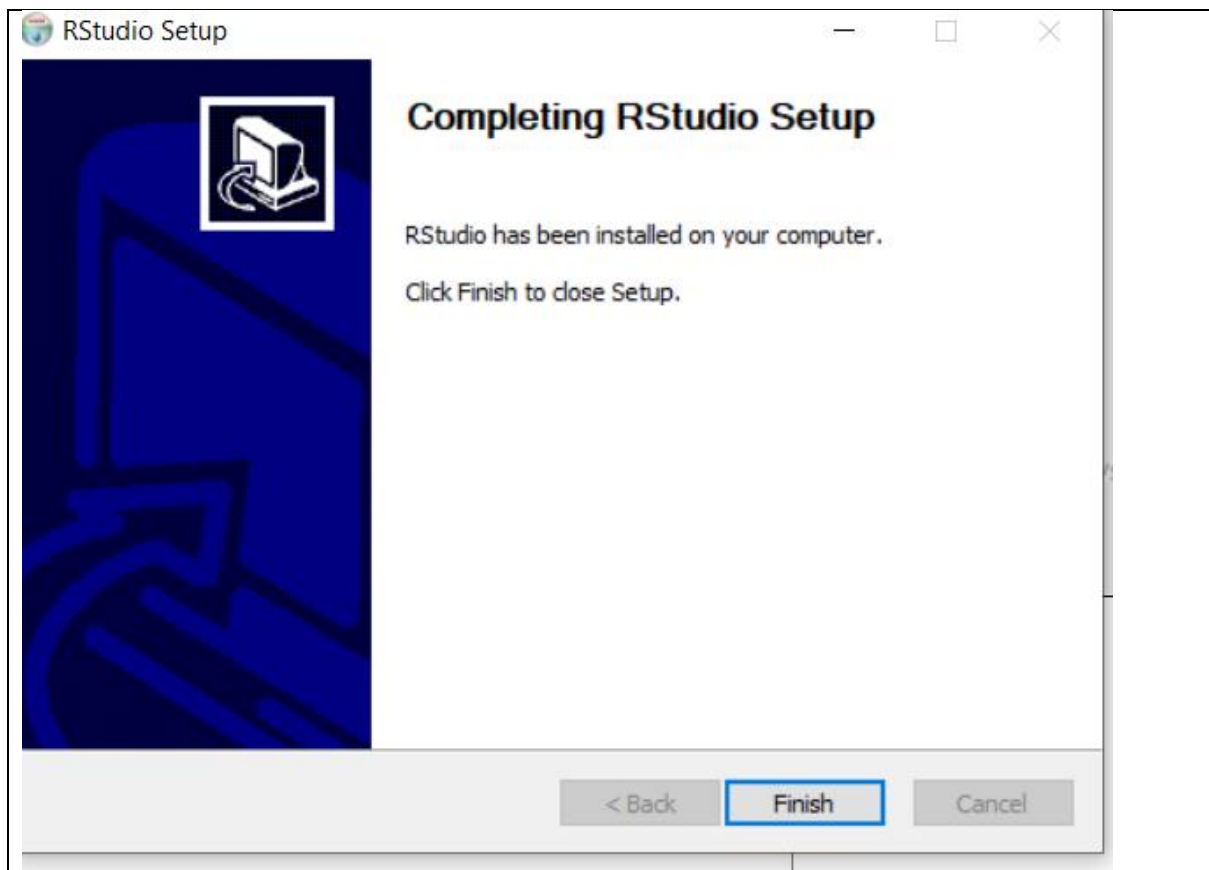


The screenshot shows a web browser window with the URL <https://support--rstudio-com.netlify.app/products/rstudio/download/>. The page title is "RStudio Desktop 1.4.1106 - Release Notes". It contains a numbered list of instructions: "1. Install R. RStudio requires R 3.0.1+." and "2. Download RStudio Desktop. Recommended for your system:". Below the list is a blue button labeled "DOWNLOAD RSTUDIO FOR WINDOWS" with the version "1.4.1106" and size "155.97MB". Below the button, it says "Requires Windows 10/8/7 (64-bit)". To the right of the text is an image of a computer monitor displaying the RStudio interface. Below the button, there is a section titled "All Installers" with text: "Linux users may need to import RStudio's public code-signing key prior to installation, depending on the operating system's security policy. RStudio requires a 64-bit operating system. If you are on a 32 bit system, you can use an older version of RStudio."

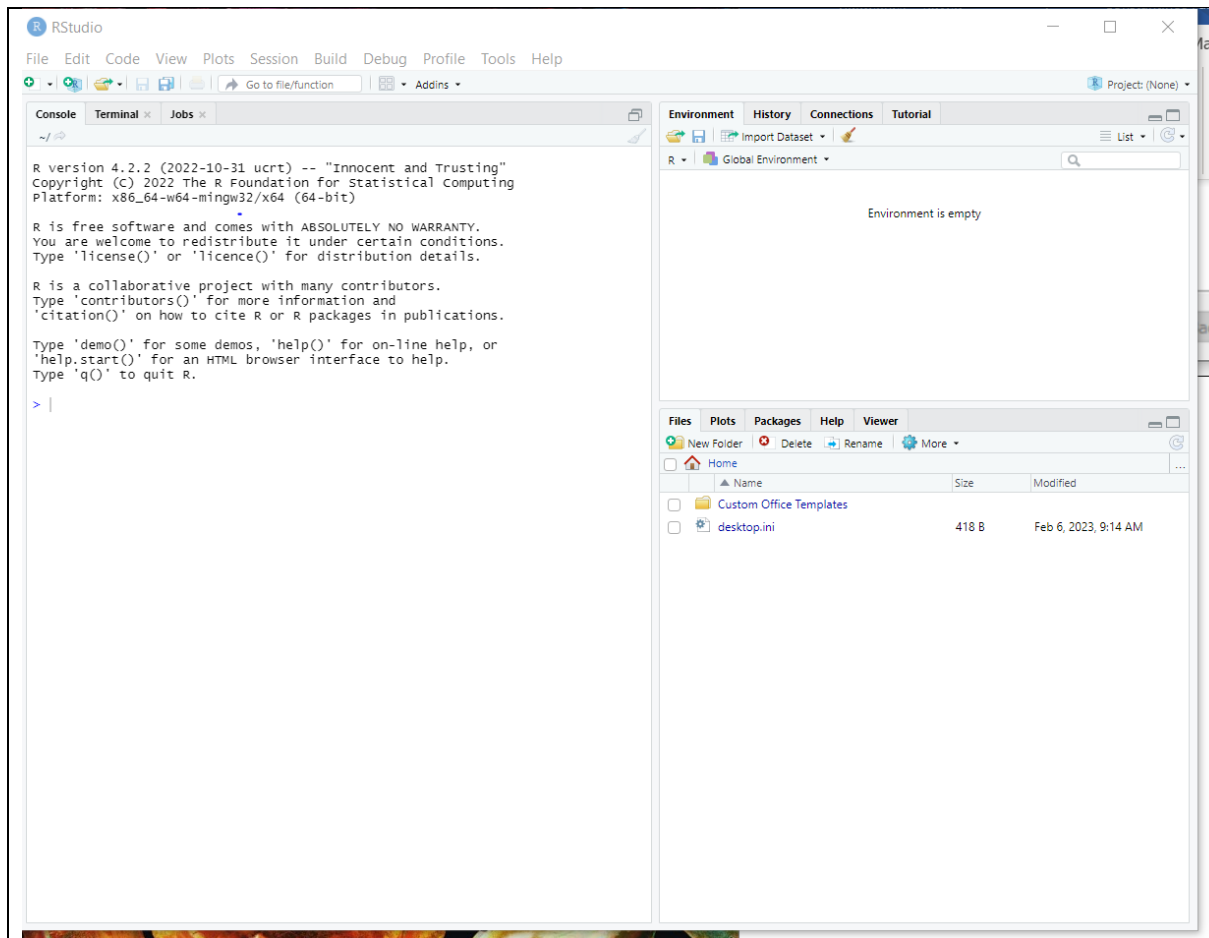
Follow all the steps of the installation process:



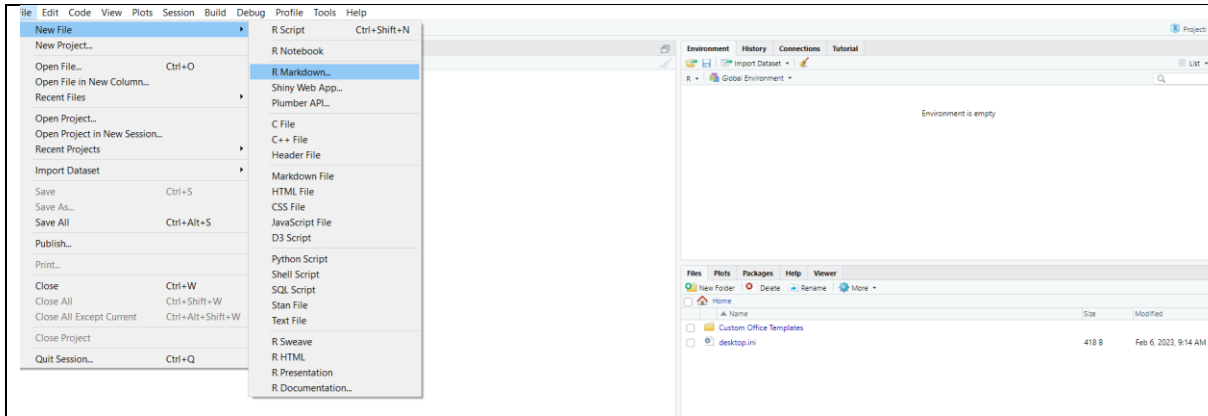
The screenshot shows the "RStudio Setup" window. The title bar says "RStudio Setup". The window has a blue header with the RStudio logo and the text "Installing" and "Please wait while RStudio is being installed.". Below the header, there is a progress bar for "Extract: pandoc.exe... 27%". Below the progress bar is a button labeled "Show details". At the bottom of the window, there is a footer that says "Nullsoft Install System v3.06.1" and three buttons: "< Back", "Next >", and "Cancel".



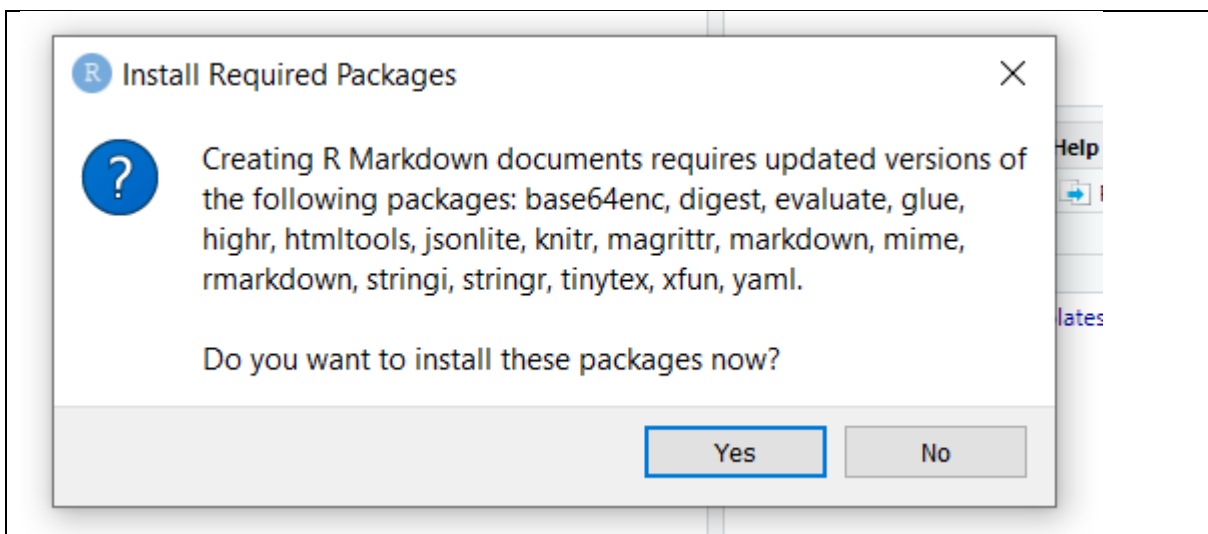
Both softwares have been successfully installed



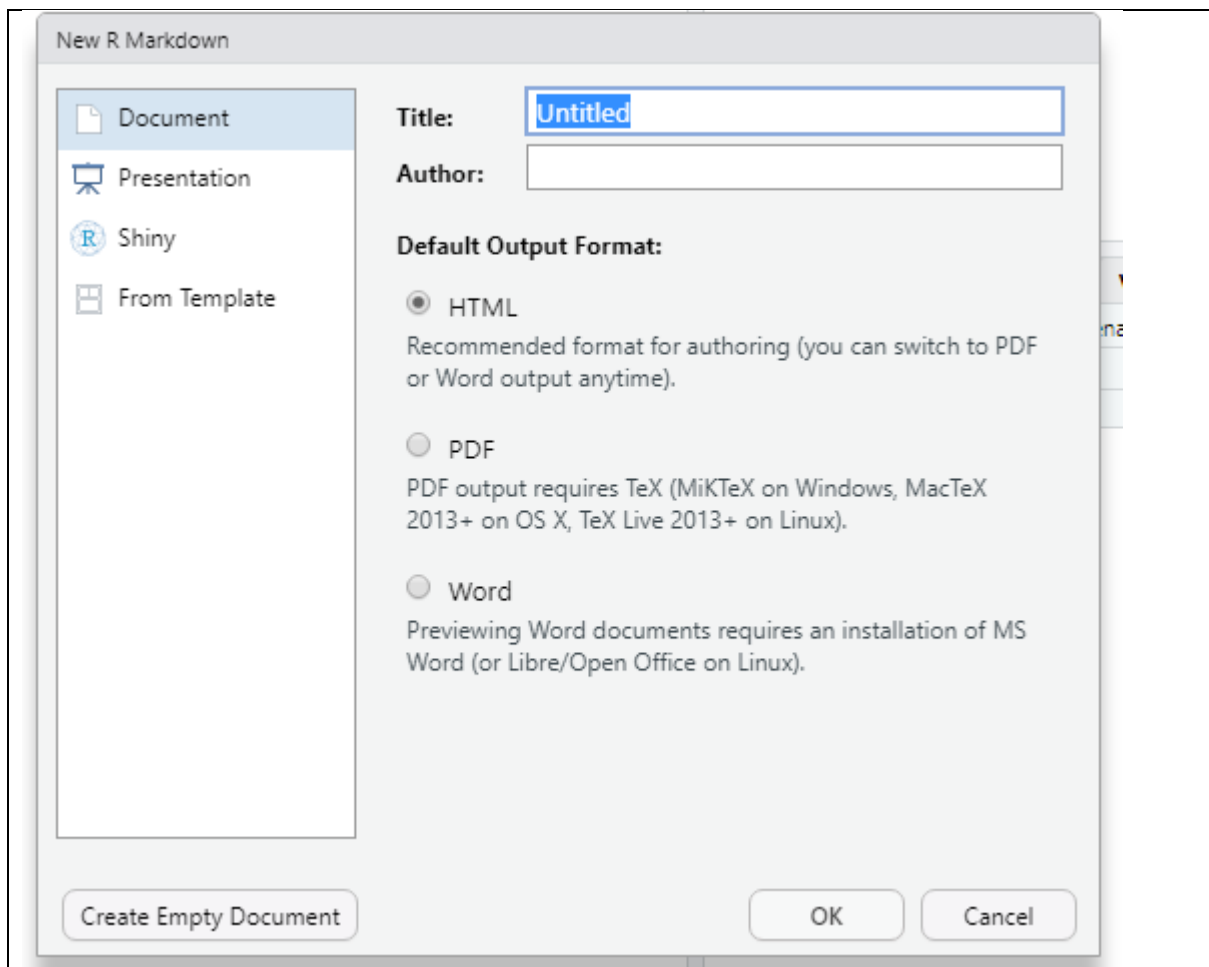
Preparation of R-markdown report, and installation of required packages for the training course:



Install the basic packages for using R-markdown:



Press Yes and wait until the following Tab emerges:



Add a representative Title and Author, choose any output format (e.g. word):

```
1 ---
2 title: "rest"
3 author: "Constantinos Panagiotou"
4 date: "2/6/2023"
5 output: word_document
6 ---
7
8 ```{r setup, include=FALSE}
9 knitr::opts_chunk$set(echo = TRUE)
10 ```
11
12 ## R Markdown
13
14 This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS word documents
15 For more details on using R Markdown see <http://rmarkdown.rstudio.com>.
16
17 when you click the Knit button a document will be generated that includes both content as well as the output of a
18 embedded R code chunks within the document. You can embed an R code chunk like this:
19
20 ```{r cars}
21 summary(cars)
22 ```
23
24 ## Including Plots
25
26 You can also embed plots, for example:
27
28 ```{r pressure, echo=FALSE}
29 plot(pressure)
30 ```
31
32 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the
33 plot.
```

Next, we need to install a number of packages which will be used to run the training material. For that purpose, remove the following text:

```
1 ---
2 title: "Test"
3 author: "Constantinos Panagiotou"
4 date: "2/6/2023"
5 output: word_document
6 ---
7
8 ```{r setup, include=FALSE}
9 knitr::opts_chunk$set(echo = TRUE)
10 ```
11
12 ## R Markdown
13
14 This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS word documents.
15 For more details on using R Markdown see <http://rmarkdown.rstudio.com>.
16
17 when you click the knit button a document will be generated that includes both content as well as the output of any
18 embedded R code chunks within the document. You can embed an R code chunk like this:
19
20 ```{r cars}
21 summary(cars)
22 ```
23
24 ## Including Plots
25
26 You can also embed plots, for example:
27
28 ```{r pressure, echo=FALSE}
29 plot(pressure)
30 ```
31
32 Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the
33 plot.
```

And add the following chunk of code: