

Install R and RStudio – A Step-by-Step Guide

- R and R-Studio Installation on **Windows**
- R and R-Studio Installation on **Linux**
- Installation and Updating Packages in R-Studio.

Install R and RStudio –Windows OS



Windows 10

Step 1: Go to official website

- Link: <https://cran.r-project.org/>
- CRAN (The Comprehensive R Archive Network)
- Refer given screenshot for **Step2.**
- Click on the Download R for Windows link.

The Comprehensive R Archive Network

Download and Install R

Precompiled binary distributions of the base system and contributed packages, **Windows and Mac** users most likely want one of these versions of R:

- [Download R for Linux](#) ([Debian](#), [Fedora/Redhat](#), [Ubuntu](#))
- [Download R for macOS](#)
- [Download R for Windows](#)

R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above.

Source Code for all Platforms

Windows and Mac users most likely want to download the precompiled binaries listed in the upper box, not the source code. The sources have to be compiled before you can use them. If you do not know what this means, you probably do not want to do it!

- The latest release (2022-03-10, One Push-Up) [R-4.1.3.tar.gz](#), read [what's new](#) in the latest version.
- Sources of [R alpha and beta releases](#) (daily snapshots, created only in time periods before a planned release).
- Daily snapshots of current patched and development versions are [available here](#). Please read about [new features and bug fixes](#) before filing corresponding feature requests or bug reports.
- Source code of older versions of R is [available here](#).
- Contributed extension [packages](#)

Step3: Click on the base subdirectory link or install R for the first time link.

R for Windows

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 \geq 3.4.x).

[old contrib](#)

Binaries of contributed CRAN packages for outdated versions of R (for R $<$ 3.4.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.

Step4: Click Download R-4.1.3 for Windows (32/64 bit)

R-4.1.3 for Windows (32/64 bit)

[Download R 4.1.3 for Windows](#) (87 megabytes, 32/64 bit)

[Installation and other instructions](#)

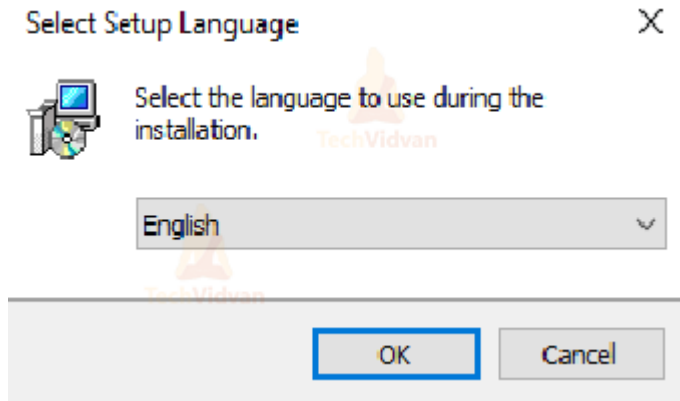
[New features in this version](#)

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. You will need a version of md5sum for windows: both [graphical](#) and [command line versions](#) are available.

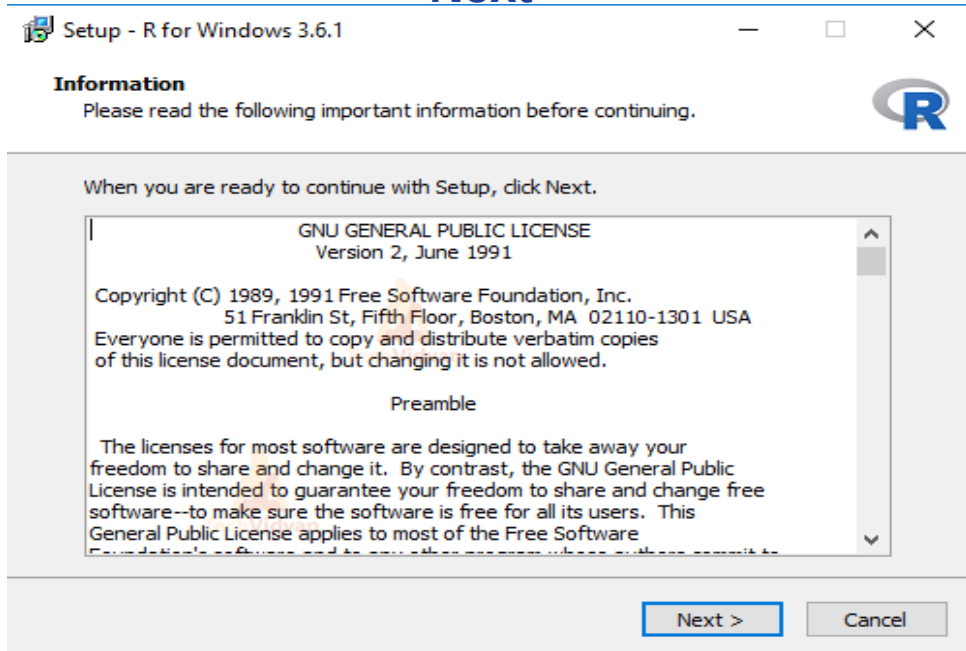
Frequently asked questions

- save the executable **.exe file** and Run the **.exe file** and follow the installation instructions.

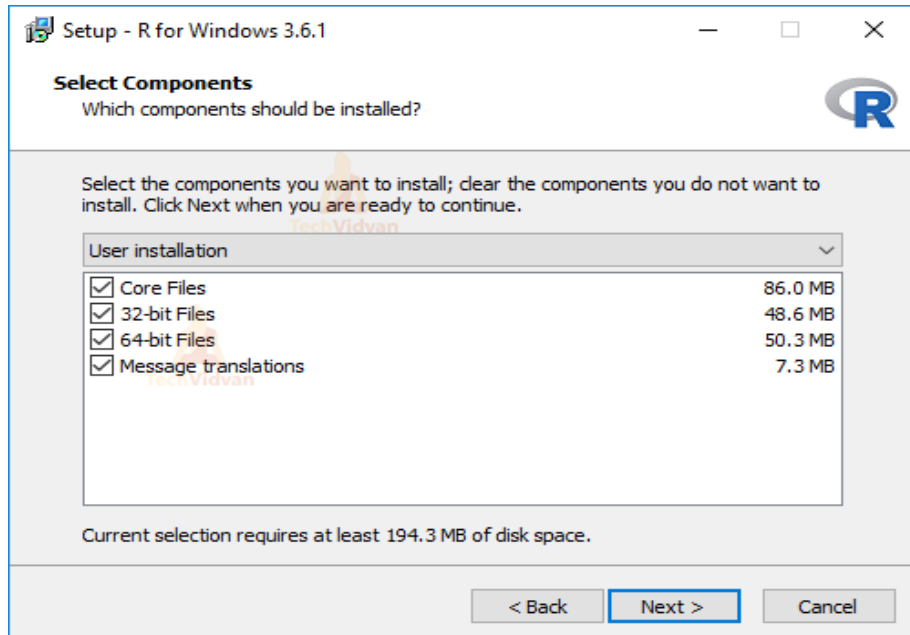
Step5: Select the desired language and then click Next.



Step6: Read the license agreement and click Next



Step7: Select the components you wish to install (it is recommended to install all the components). Click Next.



Step8: Enter/browse the folder/path you wish to install R into and then confirm by clicking Next.



Setup - R for Windows 3.6.1



Select Start Menu Folder

Where should Setup place the program's shortcuts?



Setup will create the program's shortcuts in the following Start Menu folder.

To continue, click Next. If you would like to select a different folder, click Browse.



Browse...



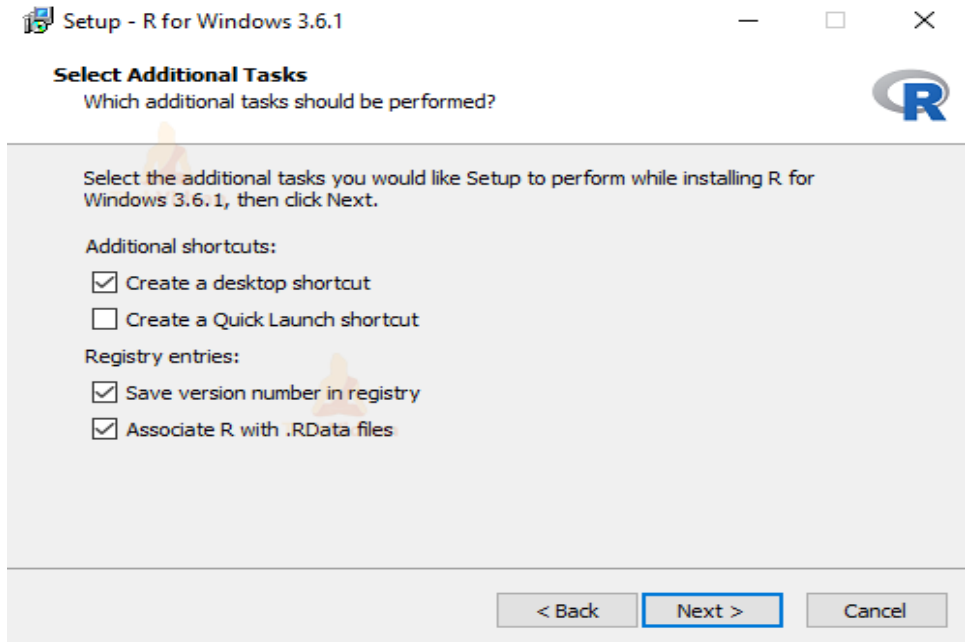
Don't create a Start Menu folder

< Back

Next >

Cancel

Step9: Select additional tasks like creating desktop shortcuts etc. then click Next.



The screenshot shows a Windows installer window titled "Setup - R for Windows 3.6.1". The window has standard Windows window controls (minimize, maximize, close) in the top right corner. The main content area is titled "Select Additional Tasks" with the subtitle "Which additional tasks should be performed?". Below this, there is a paragraph of instructions: "Select the additional tasks you would like Setup to perform while installing R for Windows 3.6.1, then click Next." The tasks are organized into two sections: "Additional shortcuts:" and "Registry entries:". Under "Additional shortcuts:", there are two checkboxes: "Create a desktop shortcut" (checked) and "Create a Quick Launch shortcut" (unchecked). Under "Registry entries:", there are two checkboxes: "Save version number in registry" (checked) and "Associate R with .RData files" (checked). At the bottom of the window, there are three buttons: "< Back", "Next >" (which is highlighted with a blue border), and "Cancel". The R logo is visible in the top right corner of the window.

Setup - R for Windows 3.6.1

Select Additional Tasks

Which additional tasks should be performed?

Select the additional tasks you would like Setup to perform while installing R for Windows 3.6.1, then click Next.

Additional shortcuts:

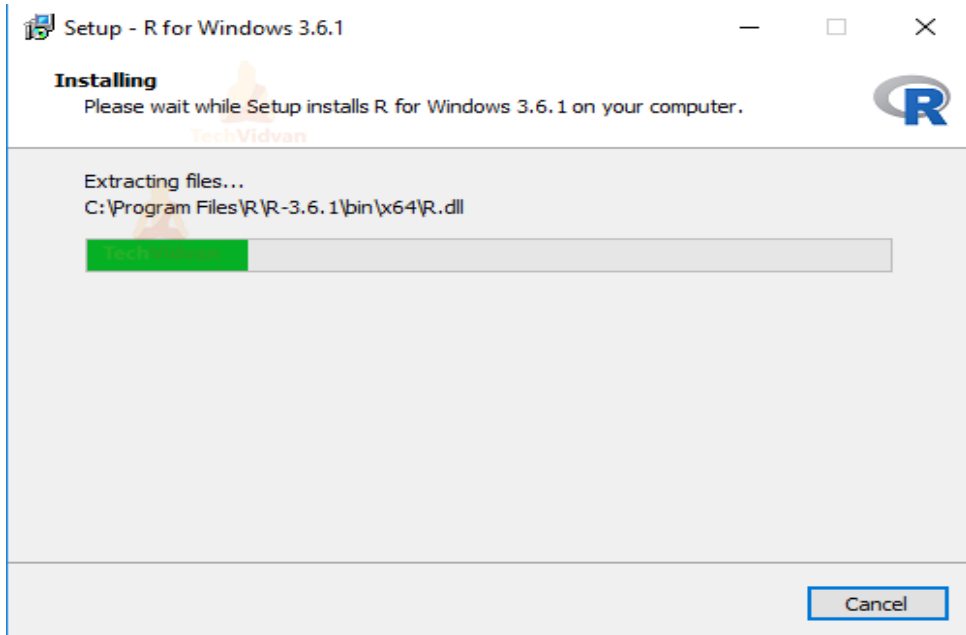
- ☒ Create a desktop shortcut
- ☐ Create a Quick Launch shortcut

Registry entries:

- ☒ Save version number in registry
- ☒ Associate R with .RData files

< Back **Next >** Cancel

Step10: Wait for the installation process to complete.



Step11: Click on Finish to complete the installation.

Setup - R for Windows 3.6.1



Completing the R for Windows 3.6.1 Setup Wizard

Setup has finished installing R for Windows 3.6.1 on your computer. The application may be launched by selecting the installed shortcuts.

Click Finish to exit Setup.

Finish

Rstudio Installation Steps on Windows

Step1: Go to official website to download R-Studio

- Link: <https://www.rstudio.com/products/rstudio/>
- Click on the download button for RStudio desktop.

There are two versions of RStudio:



RStudio Desktop


Run RStudio on your desktop



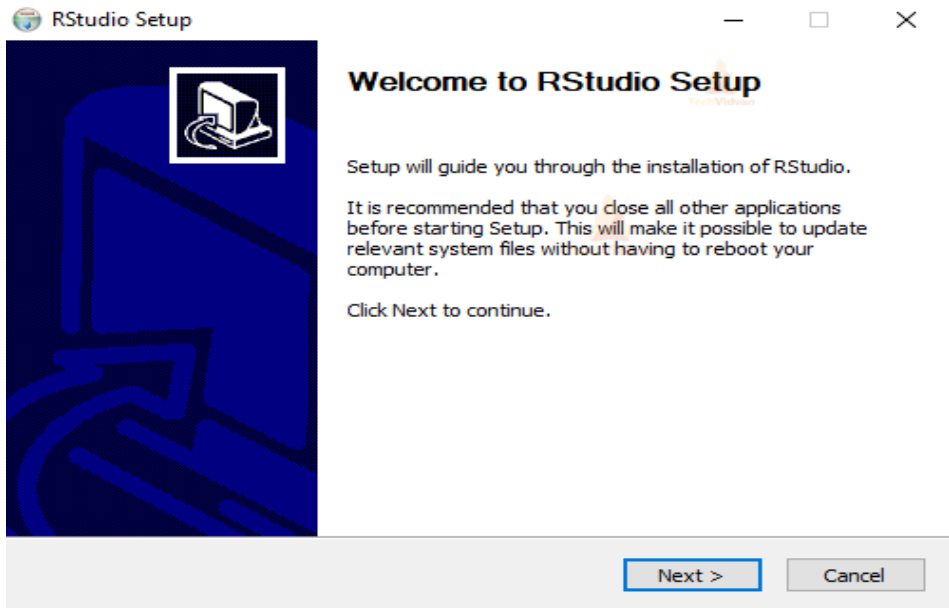
RStudio Server

Centralize access and computation

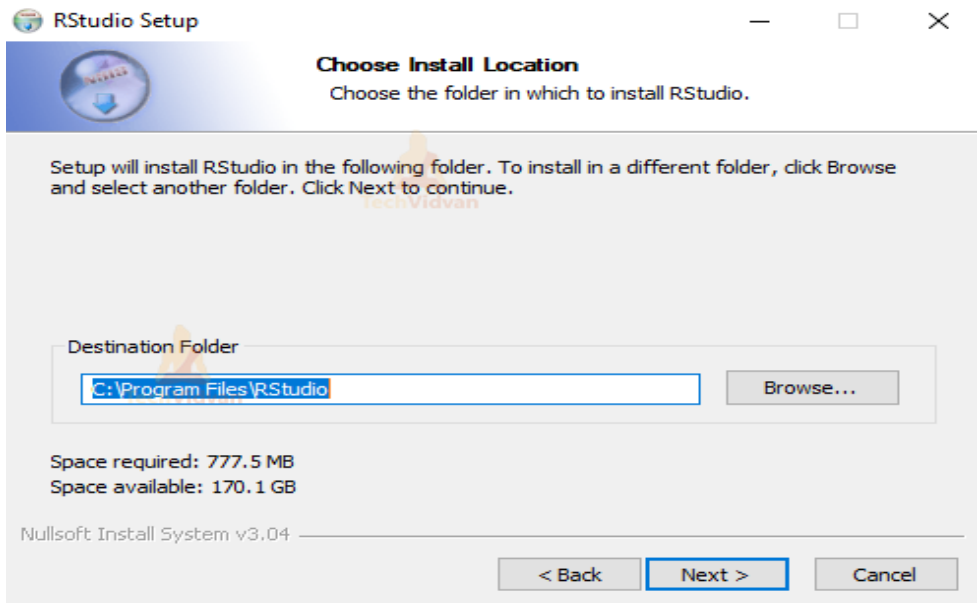
Step2: Click on the link for the windows version of RStudio and save the .exe file.

	Open Source Edition	RStudio Desktop Pro
Overview	<ul style="list-style-type: none">• Access RStudio locally• Syntax highlighting, code completion, and smart indentation• Execute R code directly from the source editor• Quickly jump to function definitions• View content changes in real-time with the Visual Markdown Editor• Easily manage multiple working directories using projects• Integrated R help and documentation• Interactive debugger to diagnose and fix errors• Extensive package development tools	<p>All of the features of open source; plus:</p> <ul style="list-style-type: none">• A commercial license for organizations not able to use AGPL software• Access to priority support• RStudio Professional Drivers• Connect directly to your RStudio Workbench  instance remotely
Support	Community forums only	<ul style="list-style-type: none">• Priority Email Support• 8 hour response during business hours (ET)
License	AGPL v3	RStudio License Agreement
Pricing	Free	\$995/year
DOWNLOAD RSTUDIO DESKTOP		DOWNLOAD FREE RSTUDIO DESKTOP PRO TRIAL

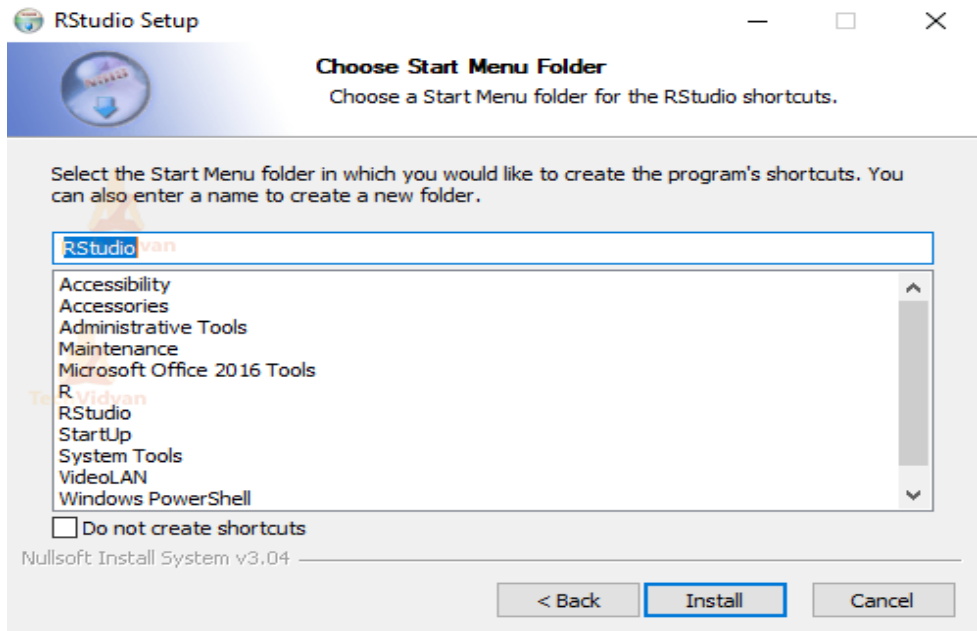
Step3: Run the .exe and follow the installation instructions and Click Next on the welcome window.



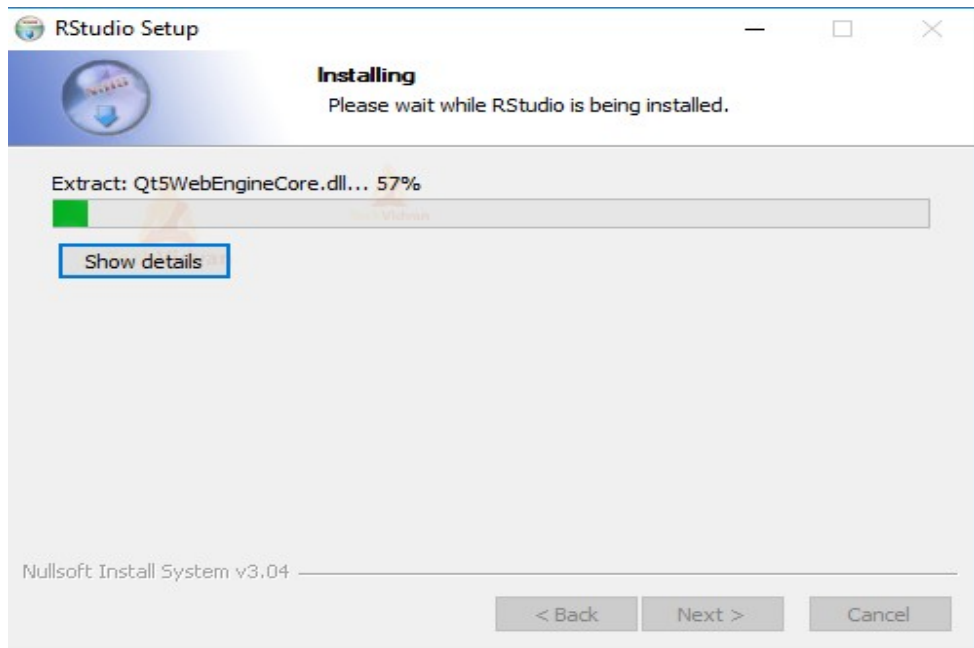
Step4: Enter/browse the path to the installation folder and click Next to proceed.



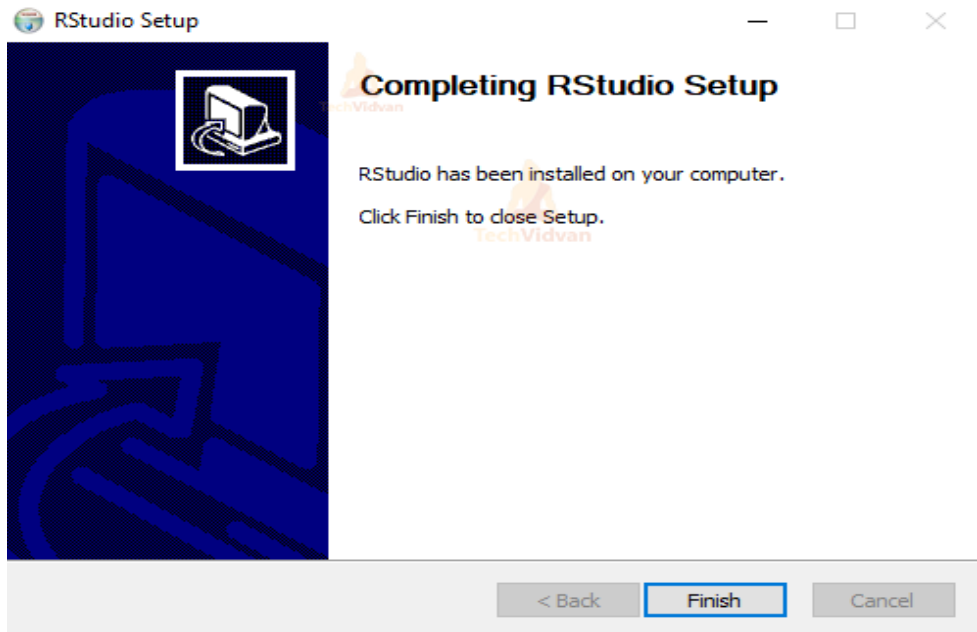
Step5: Select the folder for the start menu shortcut or click on do not create shortcuts and then click Next.



Step6: Wait for the installation process to complete.



Step7: Click Finish to end the installation.



R and R-Studio Installation on Linux



Step1: Update installed applications or packages

```
(base) guru@guru-Latitude-E7450:~$  
(base) guru@guru-Latitude-E7450:~$ sudo apt-get update  
[sudo] password for guru:  
Hit:1 http://in.archive.ubuntu.com/ubuntu bionic InRelease  
Get:2 http://in.archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]  
Hit:3 https://dl.google.com/linux/chrome/deb stable InRelease  
Get:4 http://in.archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]  
Get:5 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]  
Get:6 http://in.archive.ubuntu.com/ubuntu bionic-updates/main amd64 Packages [2  
Get:7 http://security.ubuntu.com/ubuntu bionic-security/main amd64 Packages [2,  
Get:8 http://in.archive.ubuntu.com/ubuntu bionic-updates/main i386 Packages [1,  
Get:9 http://security.ubuntu.com/ubuntu bionic-security/main i386 Packages [1,1  
Get:10 http://in.archive.ubuntu.com/ubuntu bionic-updates/main Translation-en [  
Get:11 http://in.archive.ubuntu.com/ubuntu bionic-updates/main amd64 DEP-11 Met
```

Step2: To Install the R-base use the following command.

```
(base) guru@guru-Latitude-E7450:~$ sudo apt-get install r-base
Reading package lists... Done
Building dependency tree
Reading state information... Done
r-base is already the newest version (3.4.4-1ubuntu1).
The following packages were automatically installed and are no longer required:
  chromium-codecs-ffmpeg-extra shim
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 4 not upgraded.
(base) guru@guru-Latitude-E7450:~$
```

Note: After running the command, a confirmation prompt will appear. Answer it with a **'Y'** for yes.

Step3: To install **RStudio**, go to download RStudio, click on the download button for RStudio desktop, click the link for the latest R version for your OS and save the .deb file.

- Download and install the **gdebi** package using the following commands

```
(base) guru@guru-Latitude-E7450:~$ sudo apt install gdebi
[sudo] password for guru:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  chromium-codecs-ffmpeg-extra shim
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  gnome-icon-theme libgtk2-perl libpango-perl
Suggested packages:
  libgtk2-perl-doc
The following NEW packages will be installed:
  gdebi gnome-icon-theme libgtk2-perl libpango-perl
0 upgraded, 4 newly installed, 0 to remove and 4 not upgraded.
Need to get 10.3 MB of archives.
After this operation, 19.3 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
```


Step4: Use the following commands to install the R-Studio

- `wget`
`https://download1.rstudio.org/desktop/bionic/amd64/rstudio-2021.09.1-372-amd64.deb`
`sudo apt install -f ./rstudio-2021.09.1-372-amd64.deb`

```
(base) guru@guru-Latitude-E7450:~$  
(base) guru@guru-Latitude-E7450:~$  
(base) guru@guru-Latitude-E7450:~$ wget https://download1.rstudio.org/desktop/bionic/amd64/rstudio-2021.09.1-372-amd64.deb  
--2022-03-23 09:48:34-- https://download1.rstudio.org/desktop/bionic/amd64/rstudio-2021.09.1-372-amd64.deb  
Resolving download1.rstudio.org (download1.rstudio.org)... 18.66.30.127, 18.66.30.101, 18.66.30.74, ...  
Connecting to download1.rstudio.org (download1.rstudio.org)|18.66.30.127|:443... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 117891496 (112M) [application/x-debian-package]  
Saving to: 'rstudio-2021.09.1-372-amd64.deb.1'  
  
rstudio-2021.09.1-372-amd64.deb  8%[====>                ] 9.46M  1.18MB/s   eta 87s   ^  
C  
(base) guru@guru-Latitude-E7450:~$
```

Note: After running the command, a confirmation prompt will appear. Do you want to continue? [Y/n] y Answer it with a **'Y'** for yes.

Step5: Expected installation output.



Step6: To launch R-Studio via terminal use following command

```
(base) guru@guru-Latitude-E7450:~$  
(base) guru@guru-Latitude-E7450:~$  
(base) guru@guru-Latitude-E7450:~$  
(base) guru@guru-Latitude-E7450:~$ rstudio
```