

Introducción a R: Instalación y elementos básicos

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Contenido de hoy I

Instalación

R: Mis primeros pasos

Instalación

¿Cómo instalar R?

Descargar R de la página oficial: <https://cran.r-project.org/>



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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.

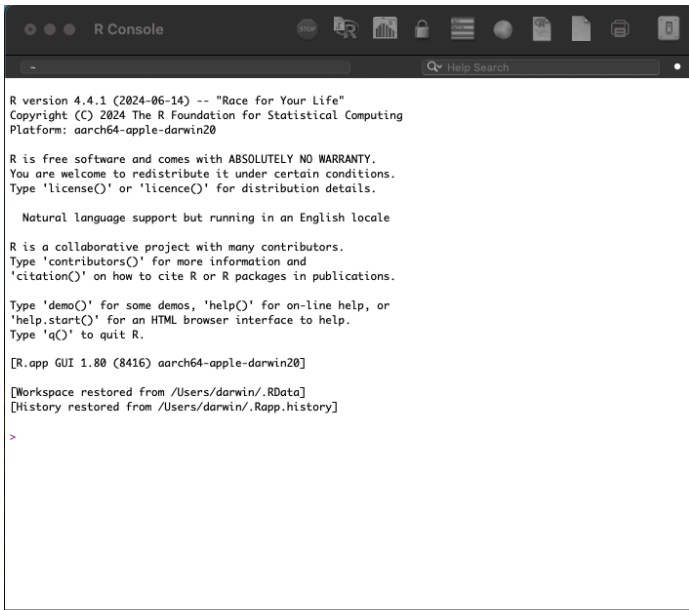
Source Code for all Platforms

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 (2024-10-31, Pile of Leaves) [R-4.4.2 tar.gz](#), read [what's new](#) in the latest version.
- The CRAN directory [src/base-prettyrelease](#) contains R alpha, beta, and rc releases as daily snapshots in time periods before a planned release.
- Between releases, the same directory [src/base-prettyrelease](#) contains snapshots of current patched and development versions. Please read about [new features and bug fixes](#) before filing corresponding feature requests or bug reports.
- Alternatively, daily snapshots are [available here](#).
- Source code of older versions of R is [available here](#).
- Contributed extension [packages](#).

Questions About R

- If you have questions about R like how to download and install the software, or what the license terms are, please read our [answers to frequently asked questions](#) before you send an email.



The screenshot shows the R Console window. The title bar reads "R Console". The window contains the following text:

```
R version 4.4.1 (2024-06-14) -- "Race for Your Life"
Copyright (C) 2024 The R Foundation for Statistical Computing
Platform: aarch64-apple-darwin20

R is free software and comes with ABSOLUTELY NO WARRANTY.
You are welcome to redistribute it under certain conditions.
Type 'license()' or 'licence()' for distribution details.

  Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

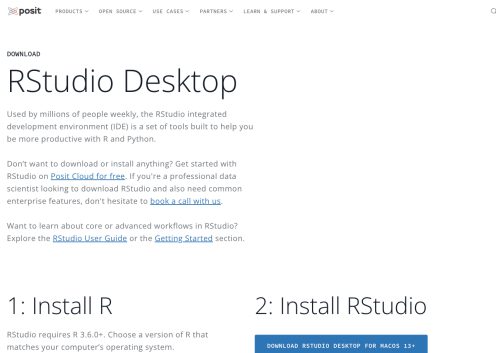
[R.app GUI 1.80 (8416) aarch64-apple-darwin20]

[Workspace restored from /Users/darwin/.RData]
[History restored from /Users/darwin/.Rapp.history]

>
```

¿Cómo instalar RStudio?

Descargar RStudio de la página oficial:
<https://posit.co/products/rstudio/download/>



The screenshot shows the official RStudio Desktop download page. At the top is the Posit logo and a navigation menu with links for PRODUCTS, OPEN SOURCE, USE CASES, PARTNERS, LEARN & SUPPORT, and ABOUT. Below the navigation bar, the word "DOWNLOAD" is followed by the heading "RStudio Desktop". A paragraph describes RStudio as an integrated development environment (IDE) used by millions of people weekly. Below this, there are two paragraphs: one for users who don't want to download or install anything, suggesting Posit Cloud for free or a paid call with support; and another for users wanting to learn about core or advanced workflows, linking to the RStudio User Guide and Getting Started section. At the bottom, there are two main sections: "1: Install R" and "2: Install RStudio". Under "1: Install R", it states that RStudio requires R 3.6.0+ and to choose a version of R that matches the computer's operating system. Under "2: Install RStudio", there is a blue button labeled "DOWNLOAD RSTUDIO DESKTOP FOR MACOS 13+".

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Q

DOWNLOAD

RStudio Desktop

Used by millions of people weekly, the RStudio integrated development environment (IDE) is a set of tools built to help you be more productive with R and Python.

Don't want to download or install anything? Get started with RStudio on [Posit Cloud for free](#). If you're a professional data scientist looking to download RStudio and also need common enterprise features, don't hesitate to [book a call with us](#).

Want to learn about core or advanced workflows in RStudio? Explore the [RStudio User Guide](#) or the [Getting Started](#) section.

1: Install R

RStudio requires R 3.6.0+. Choose a version of R that matches your computer's operating system.

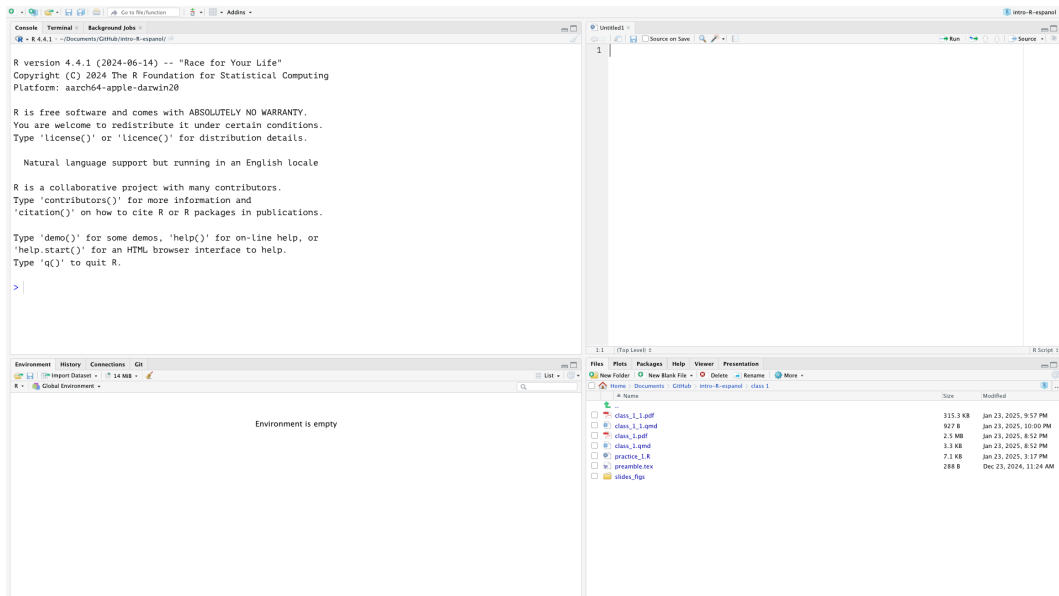
2: Install RStudio

DOWNLOAD RSTUDIO DESKTOP FOR MACOS 13+

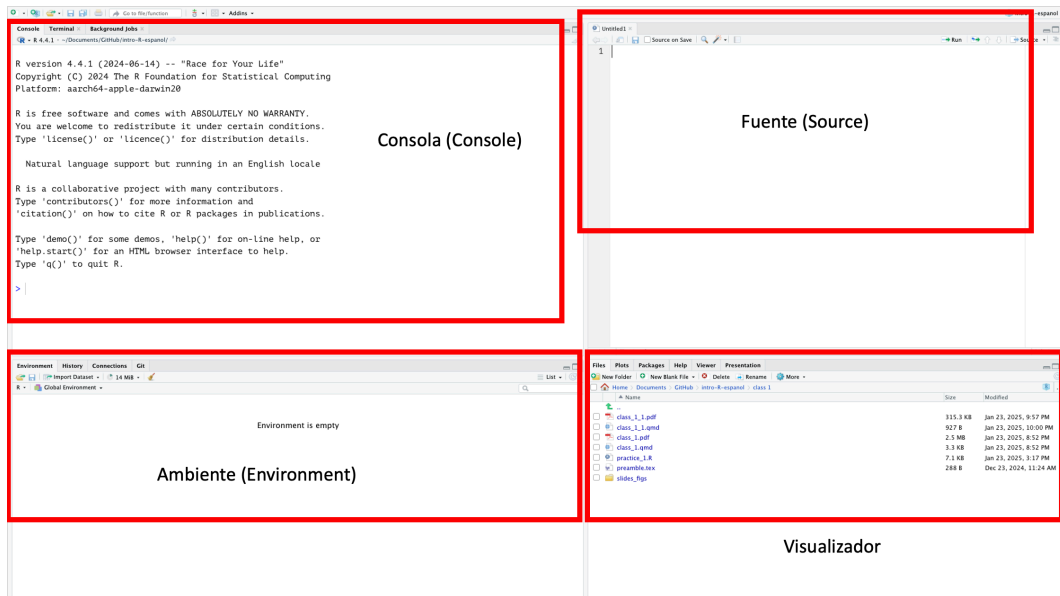
¿Qué es RStudio?

- ▶ RStudio es un entorno de desarrollo integrado (IDE) para R.
- ▶ Interfaz gráfica que facilita la escritura de código en R.
- ▶ No es la única, pero es la más popular (p.ej. RCommander, Visual Studio Code, Positron, Jupyter).

RStudio



RStudio: Elementos de la interfaz



The image shows the RStudio interface with four panels highlighted by red boxes and labeled:

- Consola (Console):** Displays the R version (4.4.1) and copyright information. It also shows the R license text and the R environment's locale (English).
- Fuente (Source):** Shows a blank script editor with the text "1" on the first line.
- Ambiente (Environment):** Shows the Global Environment, which is currently empty.
- Visualizador:** Shows a file explorer view of the current project directory, listing files such as class_1.1.pdf, class_1.1.qmd, class_1.pdf, class_1.qmd, practice_1.R, preamble.tex, and slides_figs.

R: Mis primeros pasos

R: Operaciones básicas

- ▶ R puede ser utilizado como una calculadora.
- ▶ Operadores aritméticos: $+$, $-$, \times , $/$, \wedge , $\sqrt{}$

```
# Suma básica
```

```
1 + 1
```

```
[1] 2
```

```
# Multiplicación
```

```
3 * 4
```

```
[1] 12
```

```
# Potencia
```

```
2^3
```

```
[1] 8
```

```
# Raíz cuadrada
```

```
sqrt(16)
```

```
[1] 4
```

R: Objetos