Installing R

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R Software

R is a free software environment for statistical computing and graphics. It compiles and runs on a wide variety of UNIX platforms, Windows and MacOS.

To install R and its essential programs, follow these steps:

1. Install R:

- Windows:
  - Visit the CRAN (Comprehensive R Archive Network) website: https://cran.r-project.org/
  - Choose a nearby CRAN mirror and download the R installer for Windows.
  - Run the installer and follow the installation instructions.
- macOS:
  - You can install R on macOS using the Homebrew package manager or by downloading the installer from the CRAN website.
  - To install using Homebrew, open Terminal and run the following commands:

```
##/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install.sh)"
##brew install --cask r
```

- Linux (Ubuntu as an example):
  - Open a terminal and run the following commands:

```
##sudo apt update
##sudo apt install r-base
```

2. Install RStudio (optional but highly recommended)

- RStudio is a popular integrated development environment (IDE) for R that makes working with R much easier. You can download it from the RStudio website: https://www.rstudio.com/products/rstudio/download/

3. Install essential R packages

- Once you have R installed, open R or RStudio. You can install R packages (libraries) using the **'install.packages()'** function. For example, to install the popular **'dplyr'** package, open R or RStudio and run:

```
#install.packages("dplyr")
```

- Install any other packages you need for your specific tasks by replacing `"dplyr"` with the package name.

4. Start using R

- You can now start using R by opening R or RStudio. You can write and run R scripts, interactively work in the console, and perform data analysis and visualization.

5. Learn R

- To effectively use R, consider learning the language and its data analysis capabilities using the swirl package.

6. Or videos

Many introduction videos explaining the basics of R can be found on YouTube. For example:

https://www.youtube.com/watch?v=riONFzJdXcs/list=PLqzoL9-eJTNBDdKgJgJzaQcY6OXmsXAHU/
https://www.youtube.com/watch?v=SWxoJqTqo08/list=PLjgj6kdf_snYBkIsWQYcYtUZiDpam7ygg/
https://www.youtube.com/watch?v=LjuXiBjxryQ/

If you prefer to read manuals about R, please visit https://cran.r-project.org/ manuals. html.