

1.



## Activity overview

In the last activity, you explored the R sandbox and used some R packages such as the tidyverse. In this activity, you'll explore further with the tidyverse collection of packages and learn about them using the `browseVignettes` function.

By the end of this activity, you will know how to easily load vignettes. Moving forward, you can use the `browseVignettes` function to access and review included documentation to better understand each R package you will use.

### Install the tidyverse

If you have not yet installed the tidyverse, open RStudio.

Log in, navigate to the console, type `install.packages("tidyverse")`, and press Enter (Windows) or Return (Mac).

Then wait as RStudio installs the tidyverse packages (be patient, this can take a little bit). You'll receive a message that the install is done.

```
* installing *binary* package 'tidyverse' ...
* DONE (tidyverse)

The downloaded source packages are in
  '/tmp/RtmpUCbADH/downloaded_packages'
> |
```

### Load the tidyverse

Once the tidyverse packages have been installed, load them so that they are available in your current R session. Load the core tidyverse with the `library` command. The core tidyverse contains the main packages that work together to make your data analysis smooth and efficient.

To load the core tidyverse, type `library(tidyverse)` and press Enter (Windows) or Return (Mac).

```
> library(tidyverse)
— Attaching packages — tidyverse 1.3.0 —
✓ ggplot2 3.3.3      ✓ purrr 0.3.4
✓ tibble 3.0.6       ✓ dplyr 1.0.4
✓ tidyr 1.1.2        ✓ stringr 1.4.0
✓ readr 1.4.0        ✓ forcats 0.5.1

— Conflicts — tidyverse_conflicts() —
x dplyr::filter() masks stats::filter()
x dplyr::lag()     masks stats::lag()
>
```

The output in the console indicates that you have loaded the core tidyverse. Each of the core packages has a green check next to it.

The output also lists conflicts. Conflicts report which objects have the same name in two or more places within your session. This usually happens because an object in your workspace or a package you installed is masking a system object of the same name. Since you most recently loaded the tidyverse packages, they will be the default packages for your current session.

### Read tidyverse vignettes

A vignette is documentation that acts as a guide to an R package. A vignette shares details about the problem that the package is designed to solve and how the included functions can help you solve it. The `browseVignettes` function allows you to read through vignettes of a loaded package.

To check out vignettes for one specific package, type `browseVignettes("packagename")` and press Enter (Windows) or Return (Mac). Remember that functions are case-sensitive in R, so "Vignettes" must have a capital V.

For example if you execute the `browseVignettes()` function on `ggplot2`, `browseVignettes("ggplot2")`, you will have the following outcome:

## Vignettes found by "browseVignettes("ggplot2")"

### Vignettes in package ggplot2

- Aesthetic specifications - [HTML](#) [source](#) [R code](#)
- Extending ggplot2 - [HTML](#) [source](#) [R code](#)
- Using ggplot2 in packages - [HTML](#) [source](#) [R code](#)

If you are using RStudio Cloud, running this function will open a new browser tab with links to the vignettes.

#### Reflection

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In this activity, you explored the tidyverse package and learned about vignettes. In the text box below, write 2-3 sentences (40-60 words) in response to each of the following questions:

How might the tidyverse and its packages help you as you learn how to program in R?

What impact will the browseVignettes function have on your analysis?