

## Activity overview

Earlier in this course, you learned about R, a programming language used for statistical analysis, visualization, and other data analysis. In this activity, you'll complete the steps to download and install R on your computer.

By the time you complete this activity, you will be able to use R without internet access and independent of the RStudio cloud-based suite. This will enable you to use R with more flexibility, which is important for programming effectively during your career as a data analyst.

## Prepare for installation

Note: This is an optional activity. RStudio Cloud is the primary tool you will use for this course, but you can also install R to your computer for offline use. Please keep in mind that Chrome OS does not support the installation of R. If you are completing this course on a Chromebook, you should skip this activity or refer to the Linux workaround linked below.

In order to get started, you need to know your operating system. Your operating system (OS) is the firmware that makes up your computer's main interface. Some common OS's include MacOS (Apple), Windows OS (Microsoft), Chrome OS (Google). The OS on your device determines which version of R you will install.

Note: If you use Chrome OS, you will need to enable Linux (Beta) in order to use R. <u>This guide</u> ☐ details how to install R on a Chromebook. Otherwise, you can use an online coding platform like RStudio Cloud or Kaggle.

Once you have determined your OS and the version of R it requires, it is time to download and install its assets.

### Download R

- 1. Go to the R website and navigate to the <u>download page</u>☐ on the Comprehensive R Archive Network. The download page brings you to a list of locations to download R.
- 2. Click one of the "mirrors," or download locations. This will bring you to a page with download links corresponding to each OS. Don't worry about which mirror to pick--all of them host the same R installation files.
- 3. Find your OS, click its corresponding link, and download the base package. The description should say "Binaries for base distribution."
- 4. Click the download link to begin downloading R.

#### Install R

- 1. Once your download is complete, open the downloaded file. This will open R.
- 2. Select your preferred language from the drop-down menu. Then, click Next >.
- 3. Review the license information for R for your OS. This describes its open-source availability, which means it may be modified and shared by the people who use it. Click Next >.
- 4. Choose the install location for R. To pick an install location, click Browse and navigate to the folder you'd like to select. If you are not picky about where you want to install these files, the default location provided will be fine. Click Next >.
- 5. Click the checkboxes for the appropriate files you need. For example, if you have a 64-bit system, only download those files. Click Next >.
- 6. Select No for customizing your startup options. Click Next >. Then at the following screen, click Next >. You have now installed R to your computer. Using R
- 1. Open R and locate the R Console. This is a window in which you can write and execute commands in R. Find the > symbol at the bottom of the console and click the empty space to the right of it.
- 2. Enter a simple display command for your first command. Type print("Hello world!") into the command prompt. Press Enter (Windows) or Return (Mac) to show the result: [1] "Hello World!" Note that whenever you execute a command, R will give a number to each line of output that results.

- 3. Enter a simple mathematical equation for your second command. Type 1+2 into the command prompt. Press Enter (Windows) or Return (Mac) to receive the answer, which is 3. Later in this course, you will practice more simple math in R.
- 4. Enter a quit command for your last command. Type q() into the prompt and press Enter (Windows) or Return (Mac). The program will close.

# Reflection

In this activity, you downloaded and installed files for the R programming language. In the text box below, write 2-3 sentences (40-60 words) in response to each of the following questions:

What is an advantage of installing R instead of using it on an online platform?

How will learning R help you build your data analytics skills?