Optional Hands-On Activity: Downloading and installing R

TOTAL POINTS 1

1.

1 / 1 point

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. This guide 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 download page 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?

Installing R allows us to use it without internet connectivity therefore more flexible.

R is a programming language used for statistical analysis and visualization therefore it is a direct skill of data analytics.

✓ **Correct**

Congratulations on completing this hands-on activity! A good response would include that downloading and installing R is very helpful for flexible programming, as you won't have to use an online client.

You can use R for a variety of analytical and mathematical processes, which are crucial to your future duties as a data analyst. The more you become familiar with R and how to use it, the more prepared you will be for any data analysis problem that comes your way.