This document serves as a tutorial for installing all requirements for running the qDATA bioinformatics tool. The tutorial contains information for Windows, MacOS and Linux-based machines.

Windows:

1. Download the latest version of R for Windows 10/11 from https://cloud.r-project.org/;
2. Run the downloaded .exe file;
3. Install R with default settings;
4. Download the latest version of RStudio Desktop for Windows from https://posit.co/download/rstudio-desktop/;
5. Run the downloaded .exe file;
6. Install RStudio Desktop with default settings.

macOS:

1. Download the latest version of R suitable for your macOS version from https://cloud.r-project.org/;
2. Run the downloaded .pkg file;
3. Install R with default settings;
4. Download the latest version of RStudio Desktop for macOS from https://posit.co/download/rstudio-desktop/;
5. Move the .dmg file in the Applications directory;

Ubuntu-based systems:

1. Follow the instructions for the latest version of R suitable for your Ubuntu distribution from https://cloud.r-project.org/. We recommend choosing the ubuntu/ version for Ubuntu or Ubuntu derivate distributions, and debian/ only for Debian. Installation of R in Ubuntu based distributions may be performed by simply running *sudo apt install r-base* in terminal when internet connection is available.
2. Download the latest version of RStudio Desktop for your Ubuntu distribution from https://posit.co/download/rstudio-desktop/;
3. Install RStudio Desktop with default settings either in terminal or using a Package Installer. In case of unexpected errors on Ubuntu-based distributions, we recommend downloading the Debian package;
4. Download the Linux_setup.sh script from our GitHub page: https://github.com/A-Ionascu/qDATA/tree/main. Enable permissions are enabled for executing the file as program and run this script in terminal with either *./Linux_setup.sh* or *bash Linux_setup.sh* .

In order to use the qDATA software, simply open the downloaded qDATA.R file, which should automatically open the script in RStudio Desktop. If the system does not recognize the .R extension, manually choose to open the file with RStudio. Alternatively, open RStudio and open the qDATA script via File > Open File.

For details regarding qDATA usage, proceed to the our published article or the README.md file available on GitHub.