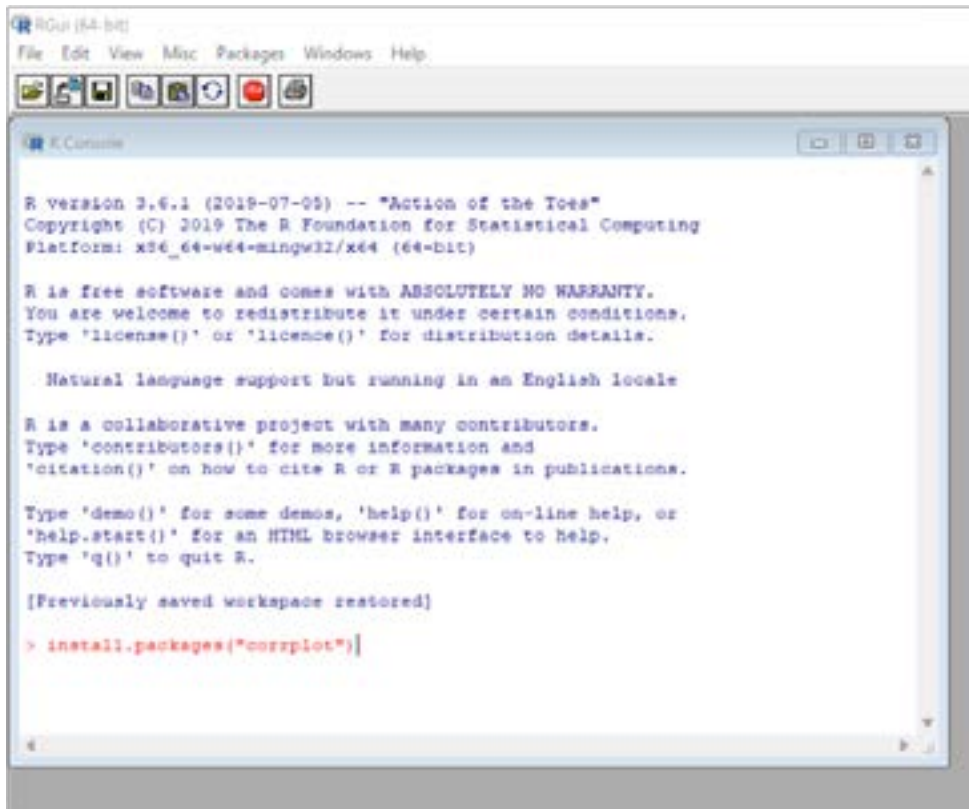## Setting Up R in Power BI Desktop

1. First, install Power BI on your own computer. There are several websites online where you can download R from. As of the recording for Q2 2022 courses, Power BI Desktop used a 3.6 version. Here is one website to download R from: R: The R Project for Statistical Computing (r-project.org).

2. You may also need to install packages or libraries to run along with the base R code. You can find the names of some of the packages here: CRAN Packages By Name (r-project.org). You will then open up the RGui, type in the command install.packages ("corrplot"), for example. Your package name will be in quotation marks.

3. Next, select a CRAN mirror to run R from on your own computer, which is preferably the location closest to the place you live.
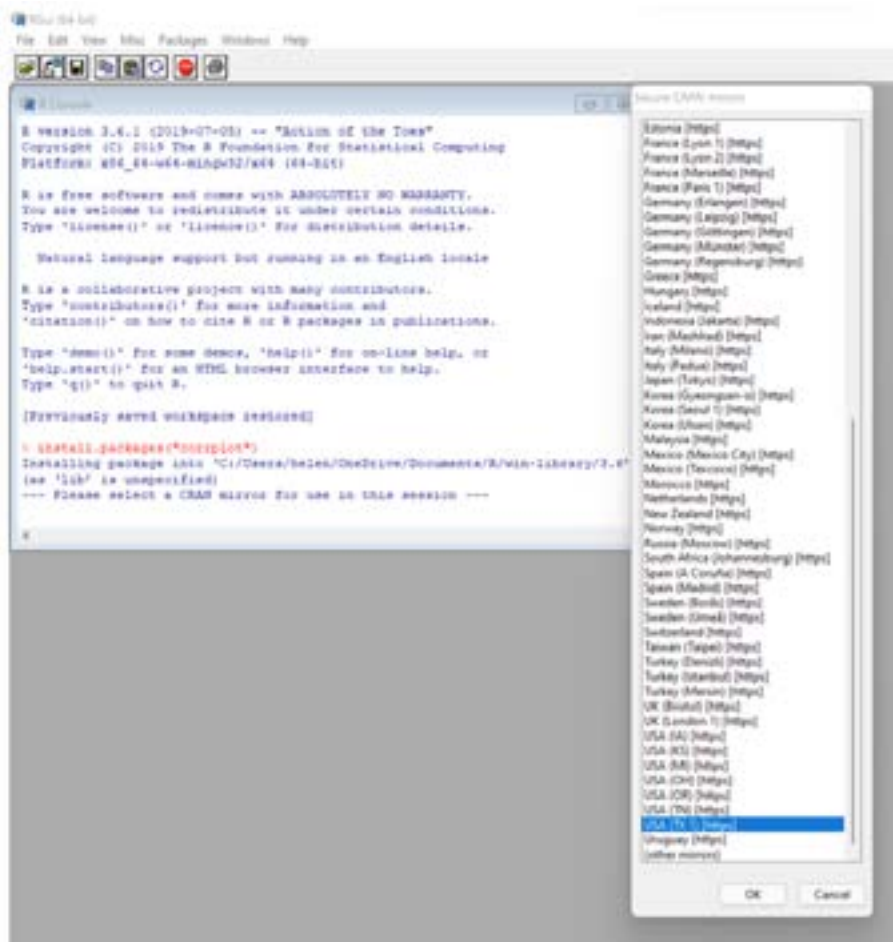
4. Select **OK** at the bottom of this location box, and the package installation will start. R will let you know when it finishes downloading.
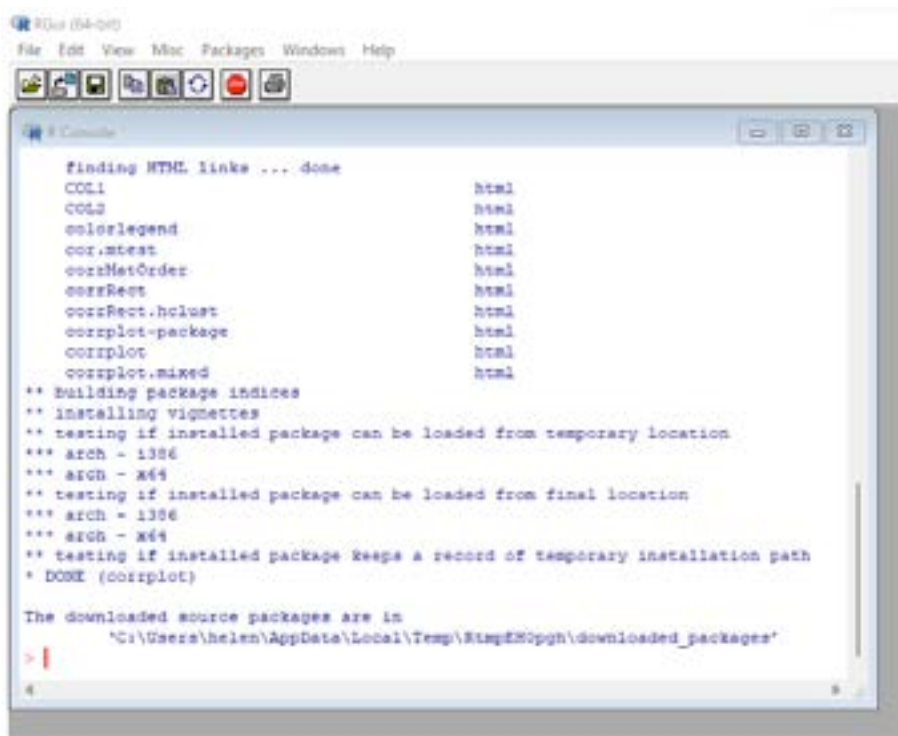
5. You can also install RStudio on your computer if you would like to run R scripts in an IDE (integrated development environment). Here is the link to the free desktop version: RStudio.

6. Once you install R, open Power BI Desktop. Navigate to **Options and settings**, then select **Options**.
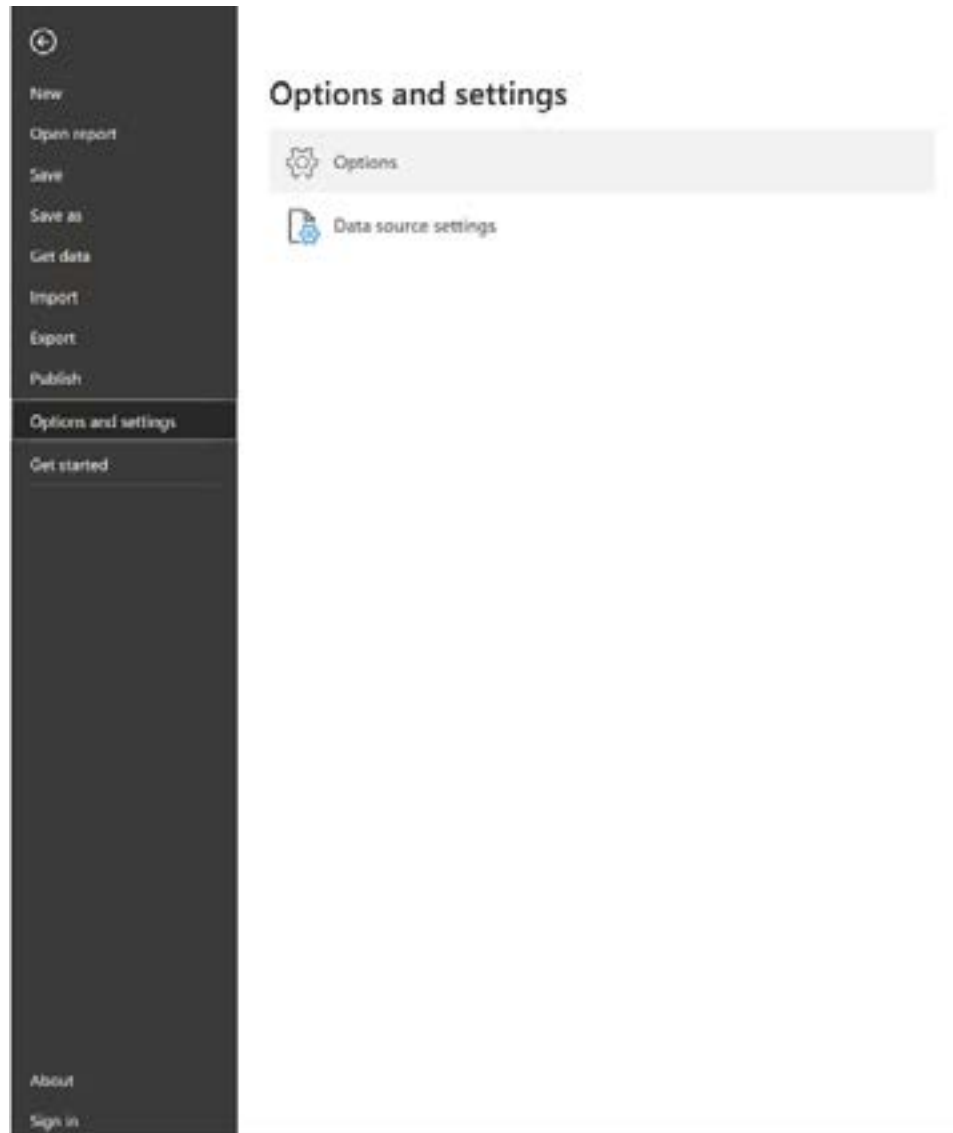
7. In the **Options** menu, select **R scripting**, then choose the version of R you want to use in Power BI Desktop. Note that you can have more than one instance of R installed on your own computer, but you will want to select the version that is compatible with Power BI from the **Detected R home directories** dropdown menu. Choose any other selections, then select **OK** to confirm these choices.
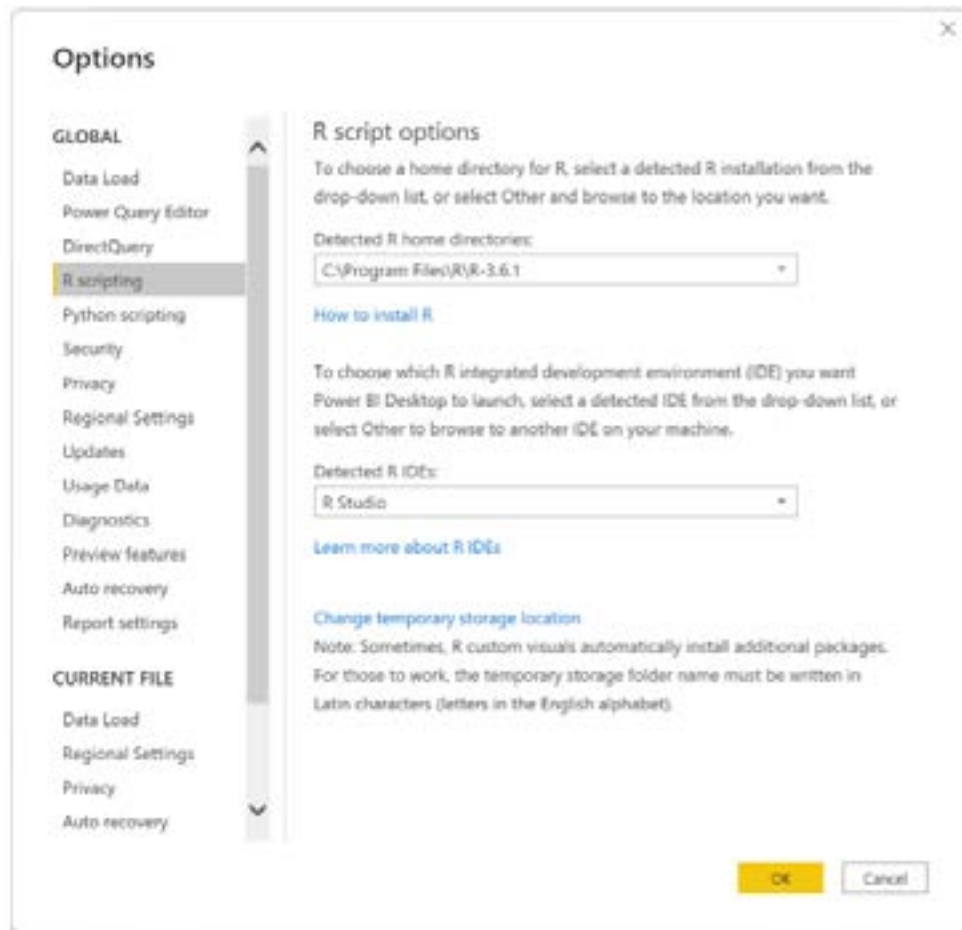
8. Once the Power BI Desktop report is published to Power BI service (Pro or Premium account). the R scripts will run through the cloud instead of off of your computer.

9. List of supported R packages in Power BI:
   [Create visuals by using R packages in the Power BI service](#)

10. Additional documentation from Microsoft: [Create Power BI visuals using R](#)

Setting Up Python in Power BI Desktop

1. First, install Python on your computer. There are two common versions of Python: Python 2 and Python 3. Python 3 is newer and the version you will likely want to use in your modeling. Download Python directly from their website: Python.org.

2. If you want to use packages or libraries in your Python scripts, you will need to install packages on your computer. You can check out the packages on this overview page: Installing Packages — Python Packaging User Guide. Typically, you will need to install the PIP first to install the packages if you have not already done so.

3. To download the packages for Python, open the Command Prompt on your computer, then type the command pip install, followed by the name of the package.


4. If you plan on writing and testing a lot of Python code, IDEs like Spyder (part of the Anaconda application) are worth installing on your own computer: Spyder — Anaconda documentation

5. In Power BI Desktop, open the application, select **Options and settings** and then select **Options**.

Options and settings

Options

Data source settings
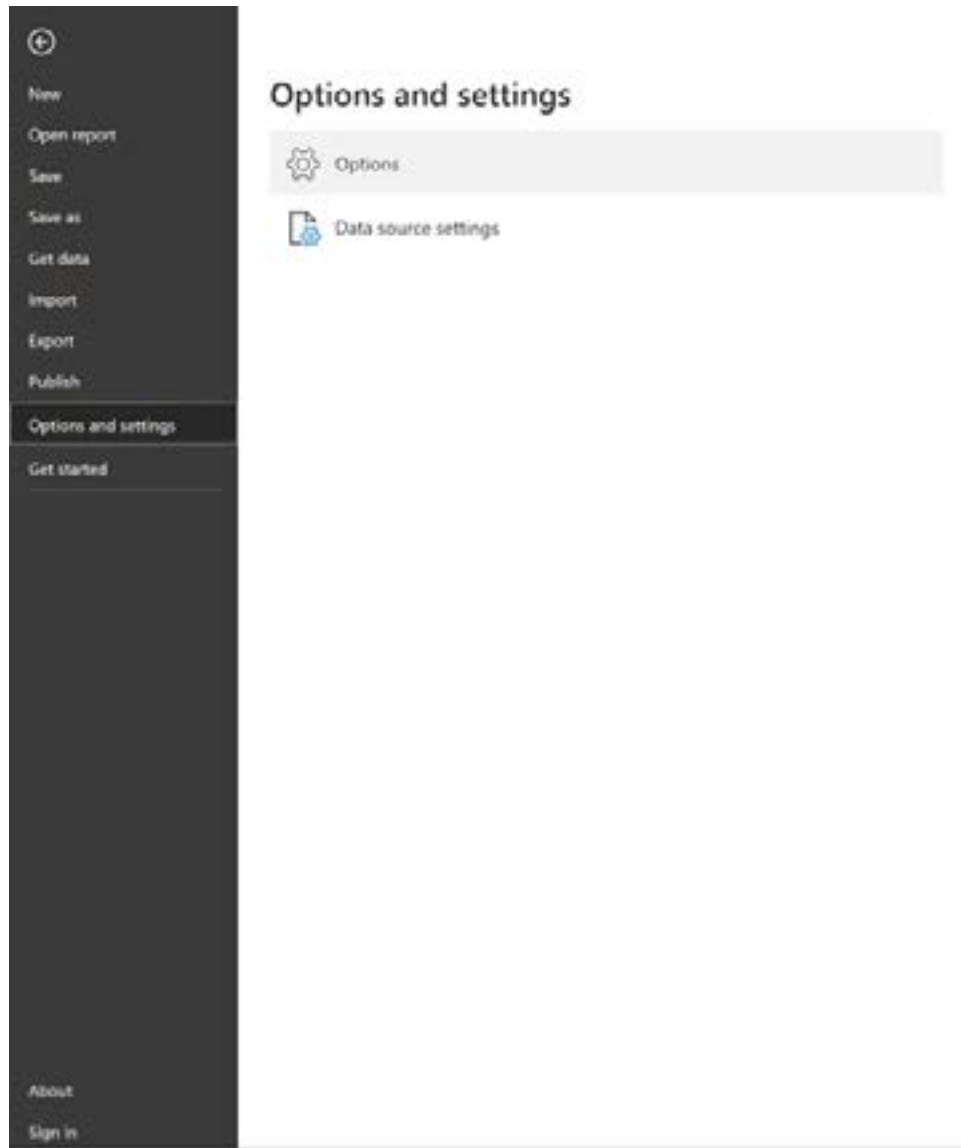
6. In the **Options** menu, select **Python scripting**.
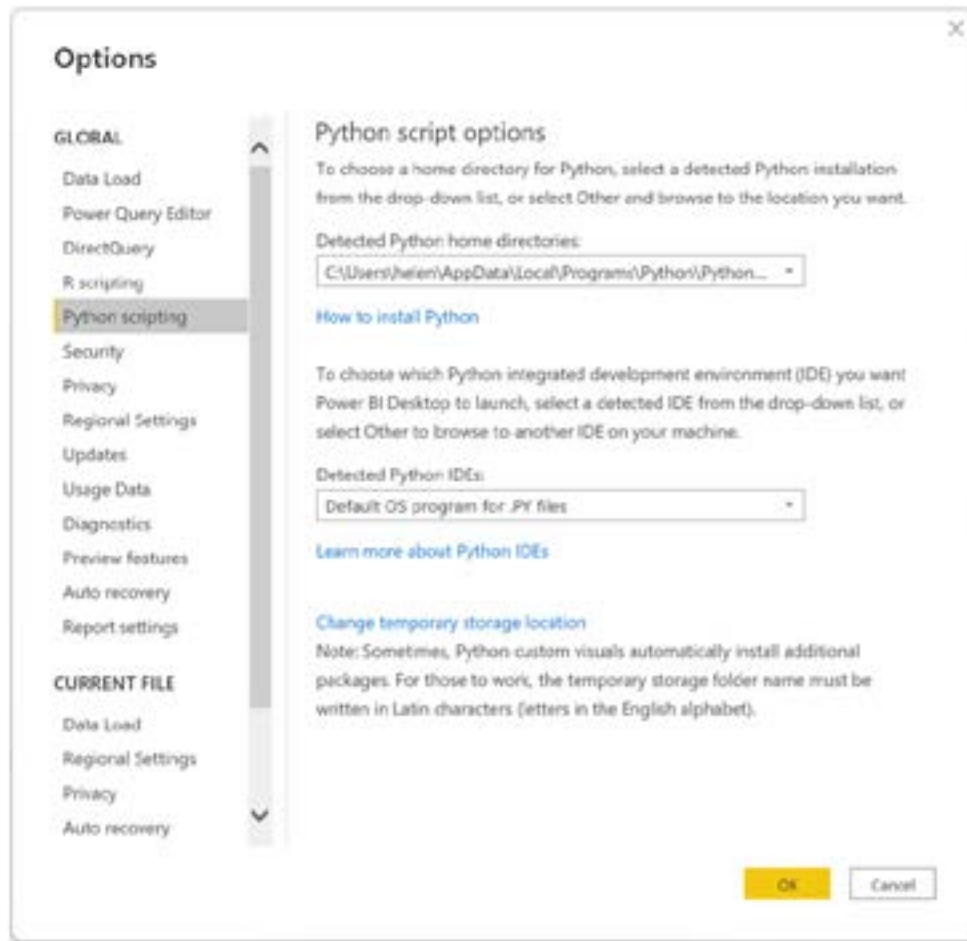
7. If you plan on sharing your work in the Power BI service, here are the supported Python packages in the cloud (far less than the packages supported by R):
Create visuals by using Python packages in the Power BI service.

8. Here is more information on running Python scripts within Power BI from the Microsoft Power BI documentation: Run Python scripts in Power BI Desktop.