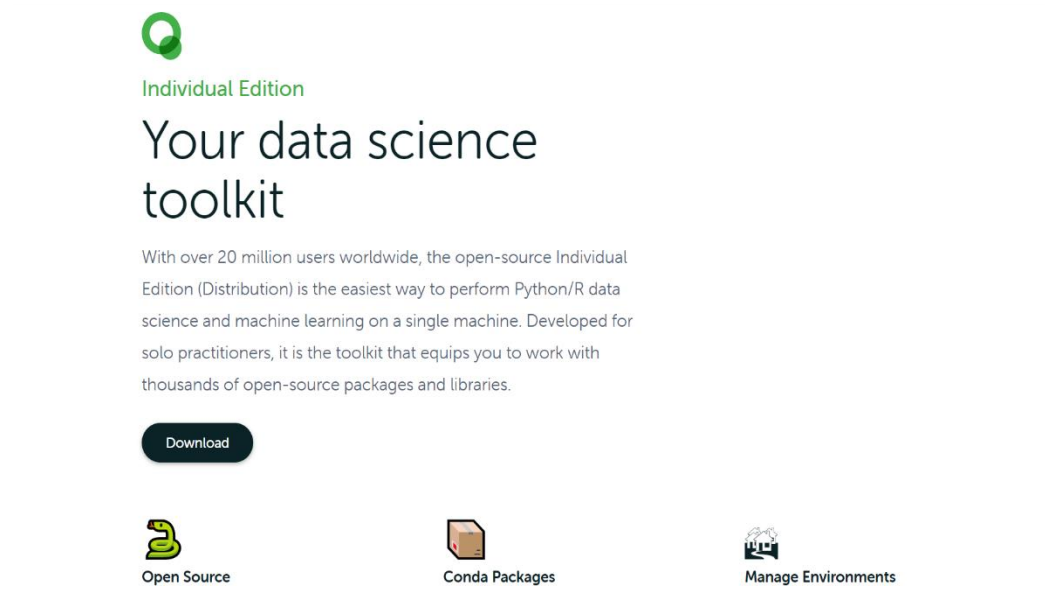


## Anaconda & Spider Installation for windows:

1. Please click on the **link** below

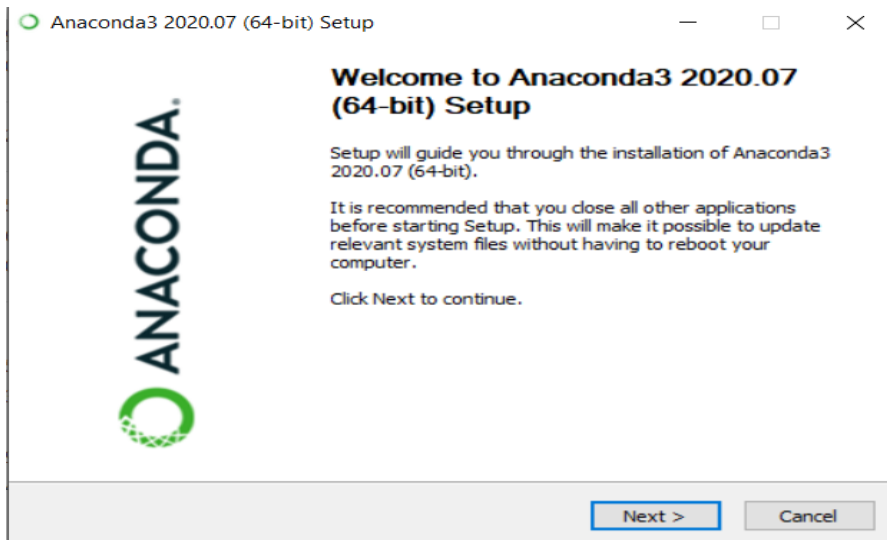
<https://www.anaconda.com/download/#windows>



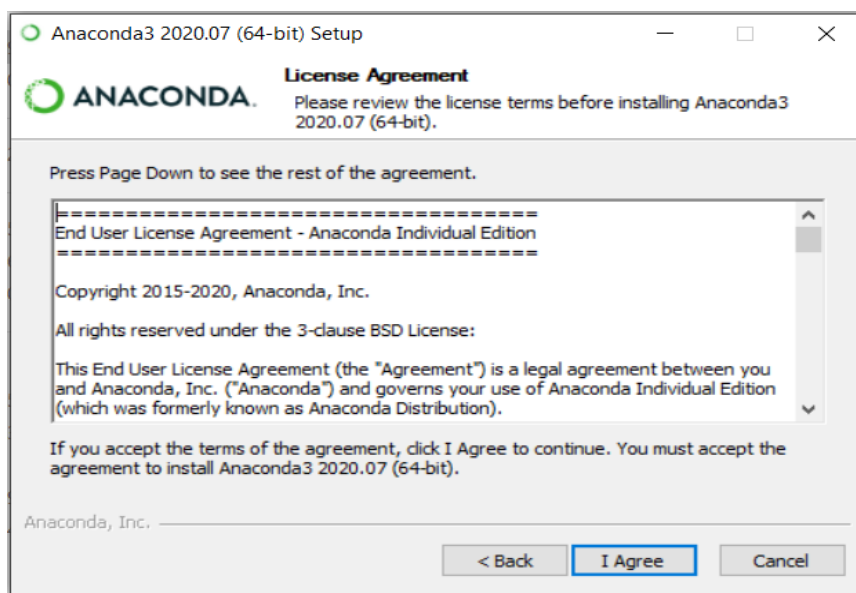
2. Click on **Download**, and then you have to check for compatibility of your Pc, after that it will start downloading.



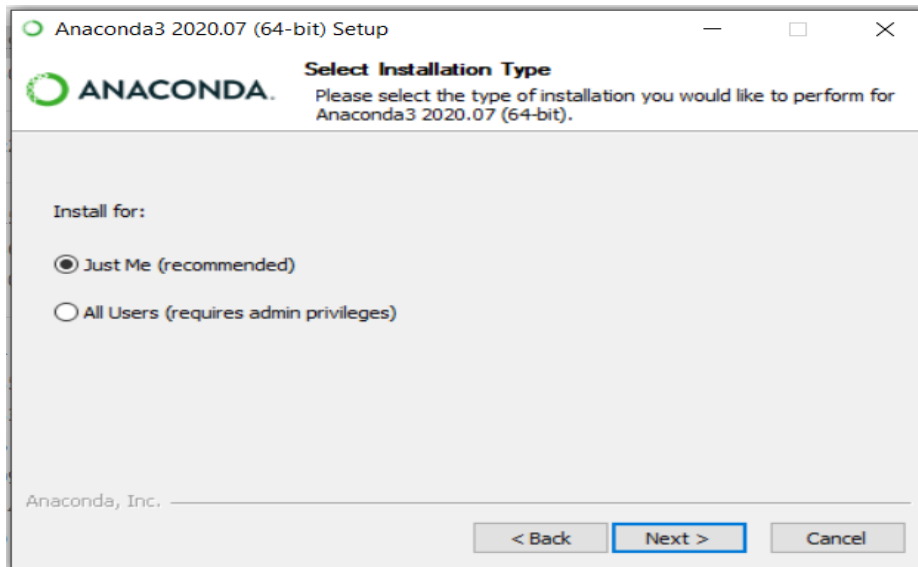
3. **Double click** the installer to launch.
4. Click **Next**.



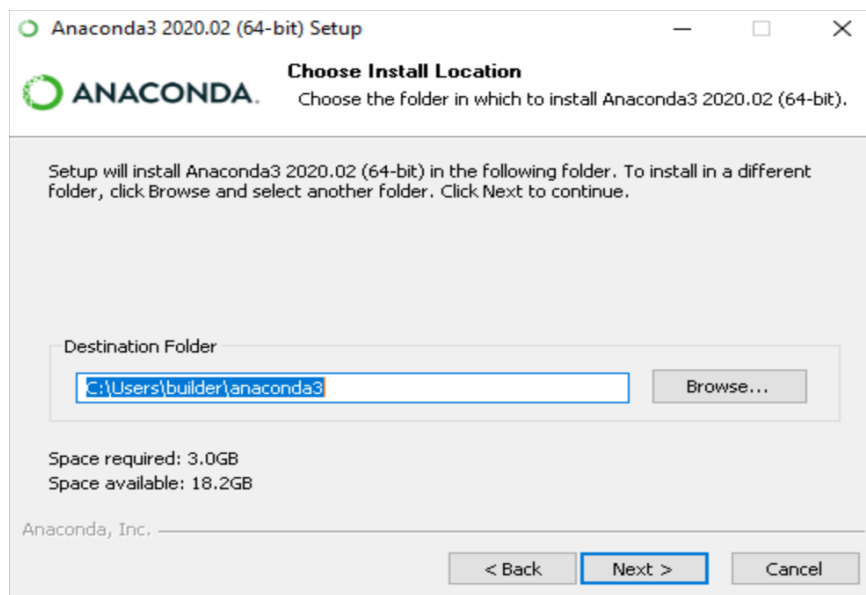
5. Read the licensing terms and click “**I Agree**”.



6. Select an install for “**Just Me**” unless you’re installing for all users (which require Windows Administrator privileges) and click Next.



7. Select a **destination folder** to install Anaconda and click the **Next** button.

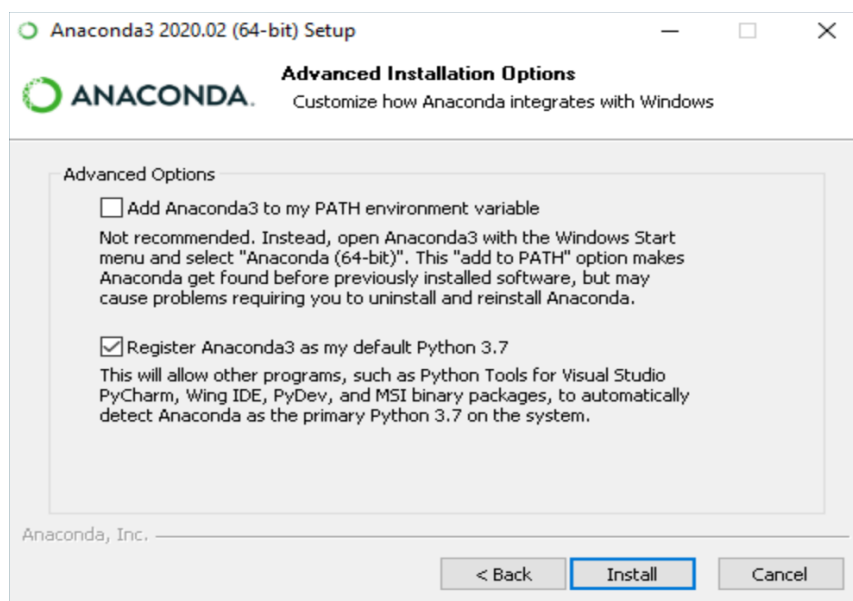


8. Choose whether to add Anaconda to your **PATH** environment variable. We recommend not adding Anaconda to the **PATH** environment variable, since this can interfere with other software.

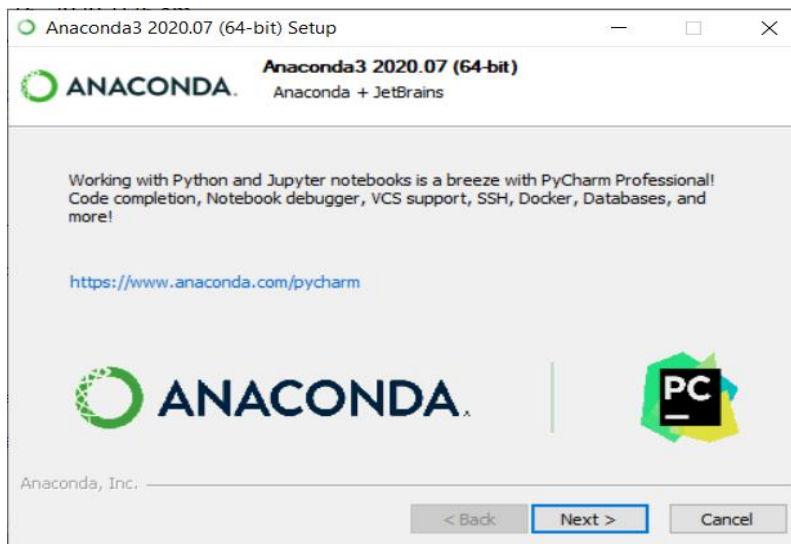
Instead, use Anaconda software by opening Anaconda Navigator or the Anaconda Prompt from the Start Menu

**NOTE:** Choose whether to register Anaconda as your default Python. Unless you plan on installing and running multiple versions of Anaconda or multiple versions of Python, accept the default and leave this box checked.

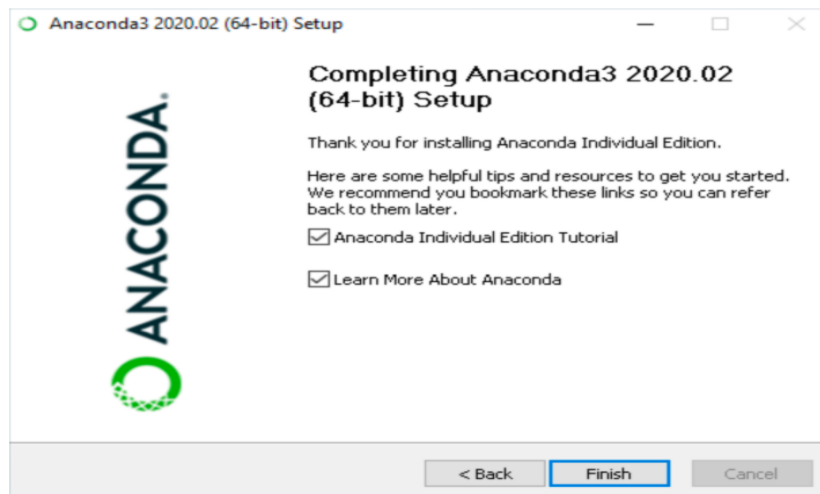
9. Click the **Install** button. If you want to watch the packages Anaconda is installing, click Show Details



10. Click the **Next** button.



11. And then click the **Finish** button.



12. After a successful installation you will see the “**Thanks for installing Anaconda**” dialog box:

## Spyder:

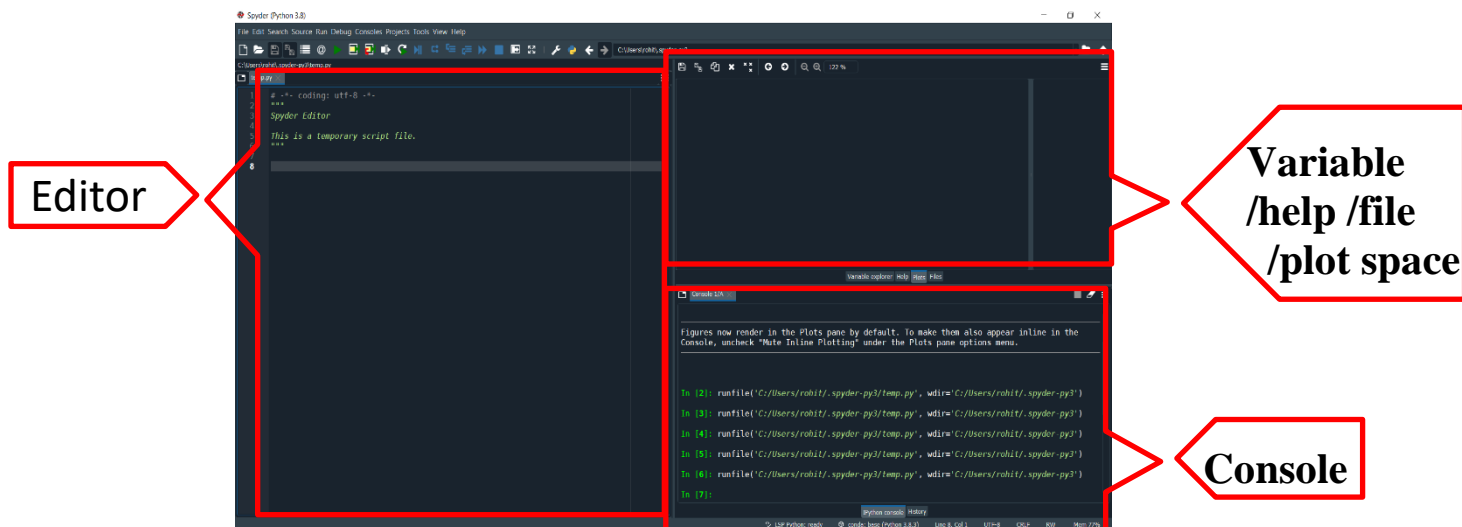
Spyder, the Scientific Python Development Environment, which is a free integrated development environment (IDE) that is included with Anaconda.

It includes:

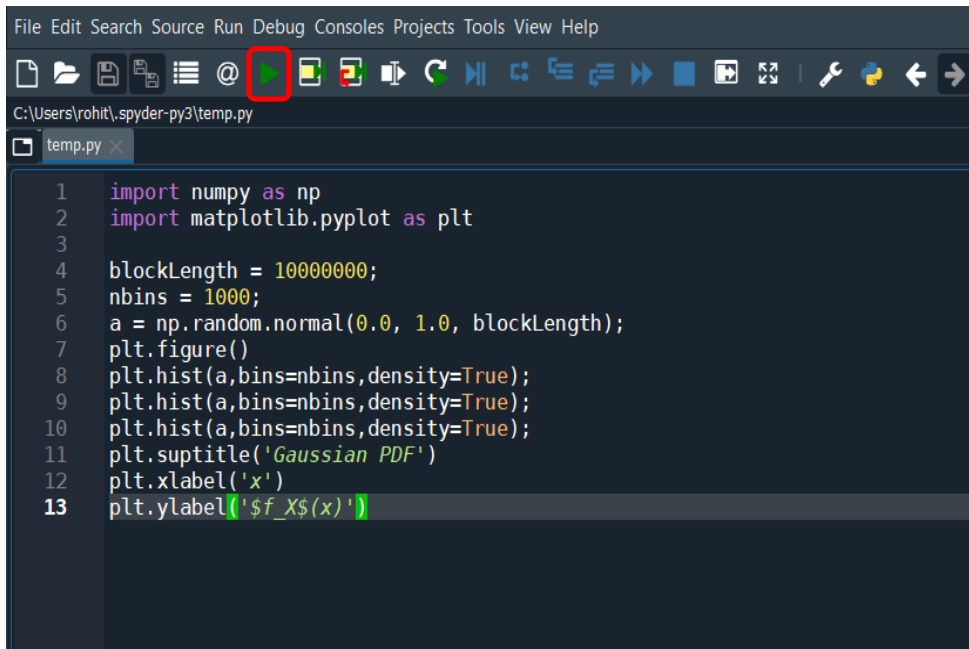
- Editing,
- Interactive testing,
- Debugging,
- Introspection features.

### Steps for Spyder setup and run a test code:

1. In Window search box, type **Spyder** and press **Enter**.
2. Spyder IDE opened and you can see a total of 3 area:
  - a. Editor
  - b. Console
  - c. Variable/help/file/plot space.

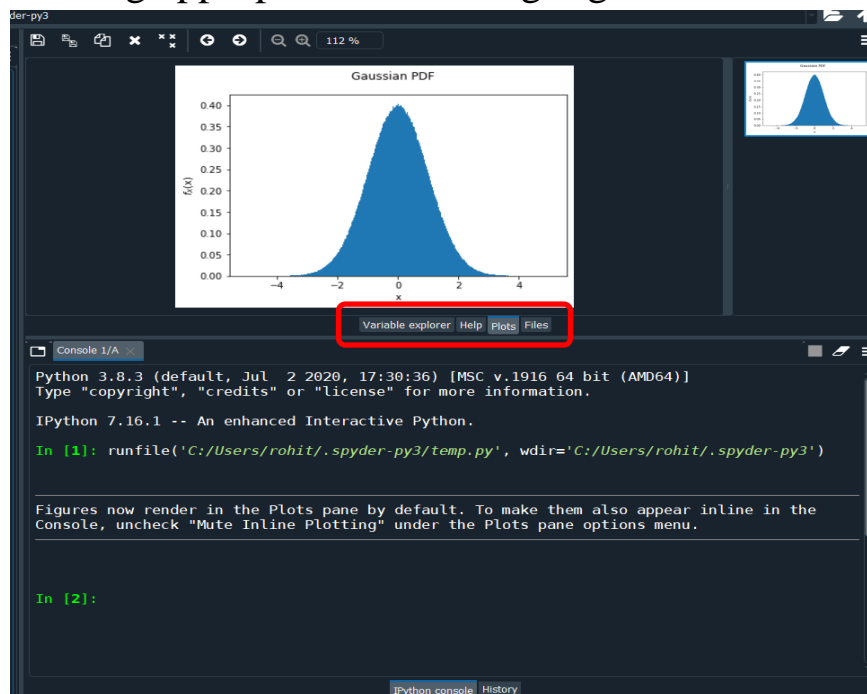


3. Let's **write a test code** in Editor and run the code by clicking on **Run** button:

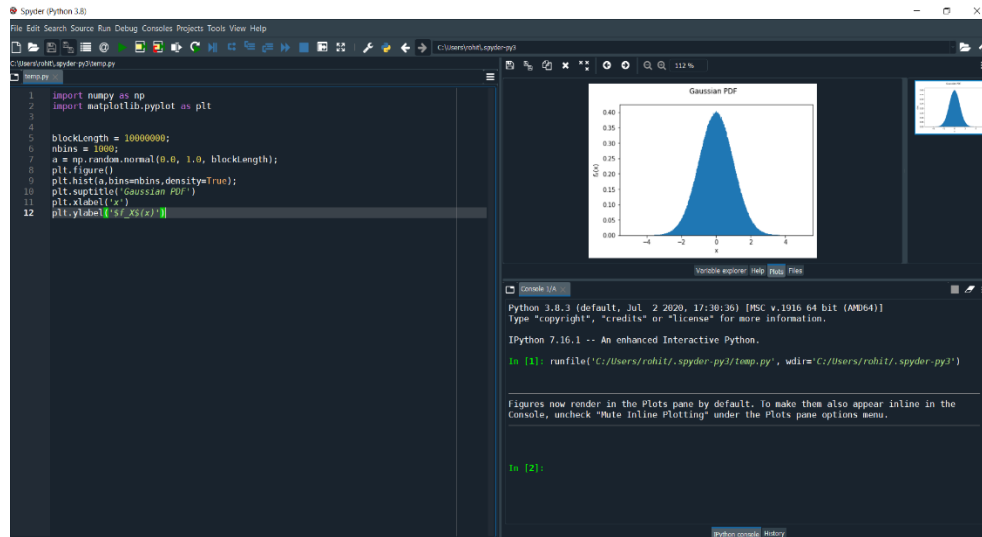


```
File Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\rohit\.spyder-py3\temp.py
temp.py x
1 import numpy as np
2 import matplotlib.pyplot as plt
3
4 blockLength = 10000000;
5 nbins = 1000;
6 a = np.random.normal(0.0, 1.0, blockLength);
7 plt.figure()
8 plt.hist(a,bins=nbins,density=True);
9 plt.hist(a,bins=nbins,density=True);
10 plt.hist(a,bins=nbins,density=True);
11 plt.suptitle('Gaussian PDF')
12 plt.xlabel('x')
13 plt.ylabel('$f_X(x)$')
```

4. You can see the **variable, plot, files** on right side of IDE by clicking appropriate tabs as highlighted with **Red color** below:

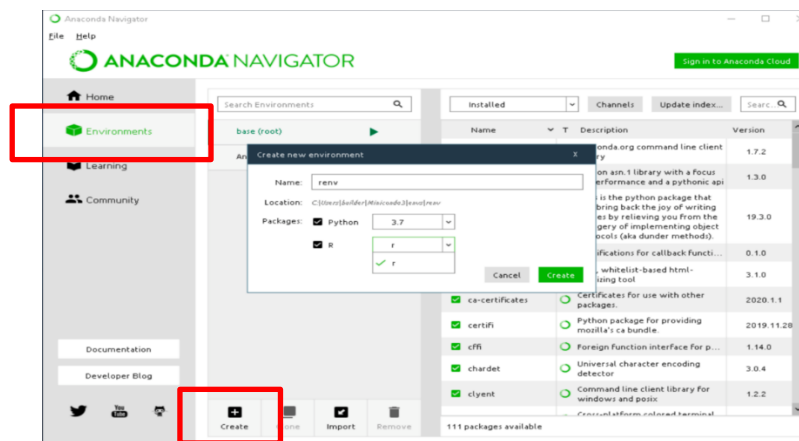


5. As a whole **Spyder** screen look like as below :



## Steps for Creating an R environment and running RStudio

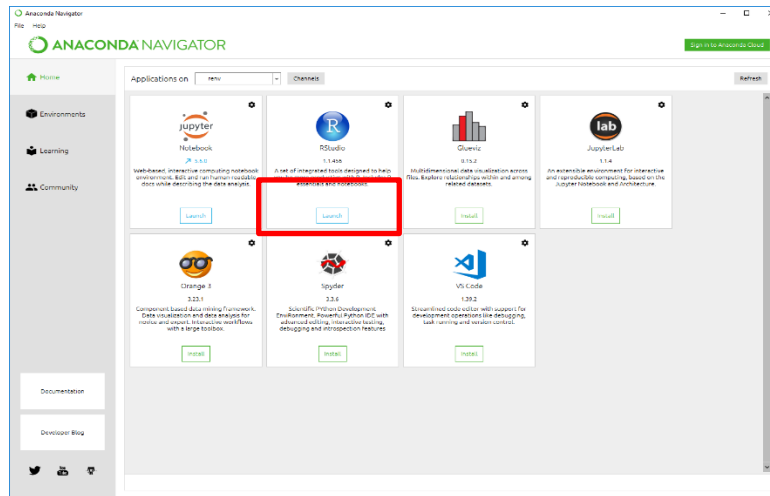
1. In Navigator, click the **Environments** tab, then click the **Create** button. The Create new environment dialog box appears.
2. In the Environment name field, type a **descriptive** name for your environment.



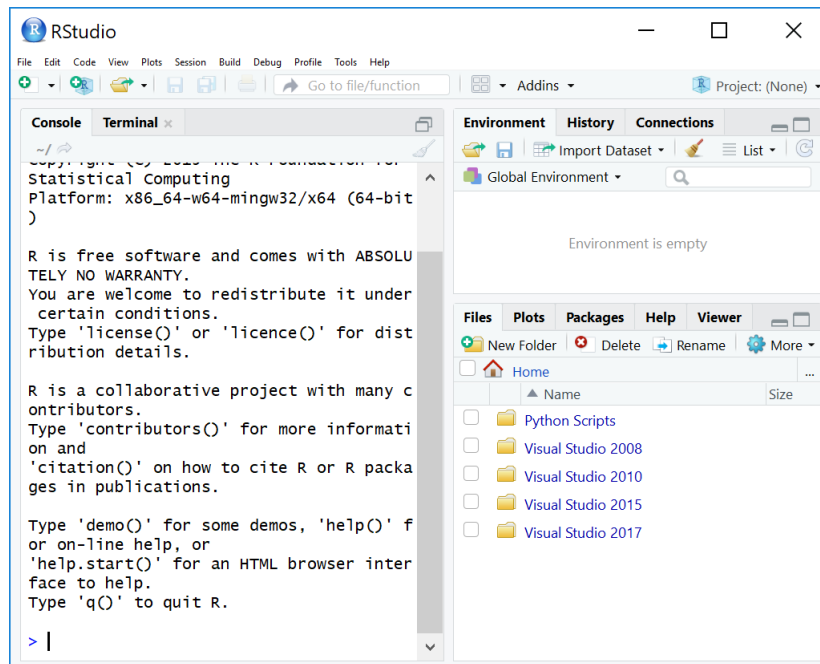




8. Click **Launch** to run RStudio from Navigator.



9. You will see RStudio running from Navigator.



### **Alternate procedure for downloading and installing RStudio:**

1. Open the link <https://www.rstudio.com/products/rstudio/download/>
2. Scroll down and come to the section below

## RStudio Desktop 1.4.1717 - Release Notes

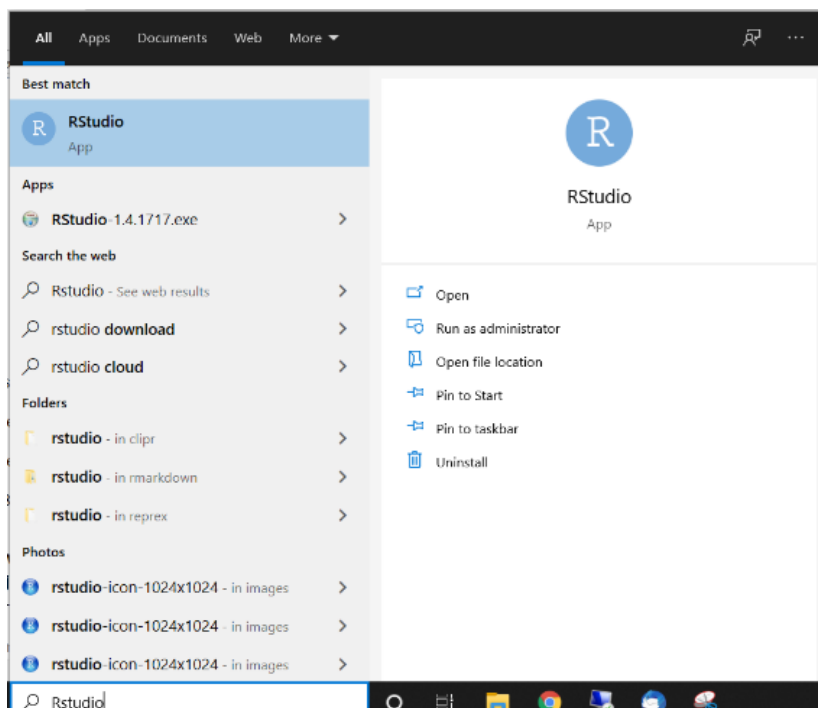
1. Install R. RStudio requires R 3.0.1+.
2. Download RStudio Desktop. Recommended for your system:



Requires Windows 10 (64-bit)



3. First install the base-R package by clicking on R 3.0.1+ and follow the procedure. (step-1 of the image)
4. After that install RSTUDIO by clicking on the "DOWNLOAD RSTUDIO FOR WINDOWS". (step-2 of the image)
5. After installation is complete, you can open RStudio from windows search



6. Run the test code given on the course website and verify your installation.