

ENERGY AUDIT

Everyone knows what an audit of accounts is - an evaluation of the income and expenditure of a person, family or organisation. In the same way, an energy audit is an evaluation of energy consumption in a home, business, industries or any other premises. It is generally used to determine where energy can be saved, conserved or used more efficiently by analysing the areas of energy loss.

Getting Started

Prerequisites

You will need to install Xampp and a python IDE.

Below are links to install them:

<https://www.apachefriends.org/index.html>

<https://www.anaconda.com/>

Installing

A step by step series of examples that tell you how to get a development env running

Say what the step will be

Download XAMPP For Windows

a XAMPP FULL Version – Installer (.exe)

To download the latest version of XAMPP, you can visit the front page of XAMPP official website at www.apachefriends.org, then click on the “XAMPP for Windows” button in the downloads section, it will automatically download the FULL version (.exe file).

Apache Friends Download Add-ons Hosting Community About Search.. Search EN

XAMPP Apache + MariaDB + PHP + Perl

What is XAMPP?

XAMPP is the most popular PHP development environment

XAMPP is a completely free, easy to install Apache distribution containing MariaDB, PHP, and Perl. The XAMPP open source package has been set up to be incredibly easy to install and to use.

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XAMPP

Download
Click here for other versions

 XAMPP for Windows
v5.6.19 (PHP 5.6.19)

 XAMPP for Linux
v5.6.19 (PHP 5.6.19)

 XAMPP for OS X
v5.6.19 (PHP 5.6.19)

The advantage of this version is that we can [install Apache](#) and [MySQL service](#) via the XAMPP Control Panel, in addition, XAMPP menu will be added to the start menu of Windows.

b XAMPP Portable Version – Installer (.exe)

If you want to download the latest PORTABLE version (.exe file), you want directly go to the link: <https://sourceforge.net/projects/xampp/files/latest/download>, once the link is opened, the browser will automatically download the file.

The advantage of this version is the installer will only extract the installation files, no change will be made in the windows system, an addition we can easily move the installation folder to another location (discuss later).

c XAMPP Archived Version – Archive (.7z and .zip)

For download another version or builds, you can visit the XAMPP page at SourceForge website: <https://sourceforge.net/projects/xampp/files/>, then click on the “XAMPP Windows” link, it will display a directory listing of XAMPP version, click your desired version and then select the file that you wish to download.

The directory listing of XAMPP version looks like the following figure:

Looking for the latest version? [Download xampp-portable-win32-5.6.15-2-VC11-installer.exe \(85.2 MB\)](#)

Home / XAMPP Windows

Name ↕	Modified ↕	Size ↕	Downloads / Week ↕
↑ Parent folder			
5.6.19	2016-03-04	3,125	
7.0.4	2016-03-04	3,615	
5.5.33	2016-03-04	1,959	
7.0.3	2016-02-24	216	
5.6.15	2016-02-24	28,078	
5.5.30	2016-02-24	97	

Suppose we click on 5.6.19, it will display a list of XAMPP builds version 5.6.9, like so:

Home / XAMPP Windows / 5.6.19

Name ↕	Modified ↕	Size ↕
↑ Parent folder		
xampp-win32-5.6.19-0-VC11-installer.exe 1	2016-03-04	113.0 MB
xampp-portable-win32-5.6.19-0-VC11-installer.exe 2	2016-03-04	92.1 MB
xampp-win32-5.6.19-0-VC11.7z 3	2016-03-04	89.1 MB
xampp-win32-5.6.19-0-VC11.zip 3	2016-03-04	179.4 MB
xampp-portable-win32-5.6.19-0-VC11.7z 2	2016-03-04	69.0 MB
xampp-portable-win32-5.6.19-0-VC11.zip 2	2016-03-04	150.7 MB
Totals: 6 Items	JagoWebDev.com	693.3 MB

From the figure above, the files can be categorized as:

1. **XAMPP Full Installer** with .exe extension that contains FULL version of XAMPP – **the largest file size**.
 2. **XAMPP Portable Installer** with .exe extension and **XAMPP Portable Archive** (.7z and .zip). Portable version means that it doesn't deliver with FileZilla FTP dan Mercury Mail Server.
 3. **XAMPP FULL Archive** (.7z and .zip) that contains FULL version of XAMPP but without installer, just extract and use.
- If we had used xampp before, then we can directly use this archive version because

Microsoft Visual C ++ is already installed on your system along with previous xampp.

- For exe portable version (.exe file), it has already been included Microsoft Visual C ++ 2008 installer.

The advantage of the archive version (both FULL and Portable) is we just need to extract and use it (easy), but note that it requires [Microsoft Visual C ++ 2008 Redistributable \(4Mb\)](#) installed to our system. In addition, the portable-version with .exe extension already include Microsoft visual C ++ 2008.

d XAMPP Version Naming Convention

Previously XAMPP uses it's own version of naming convention, it has been used until 1.8.3 version, at that version, to know the version of PHP that is used, we have to read the file readme_en.txt located in the installation folder, later, XAMPP version follow the PHP version, making it easy to know the version of PHP that is included.

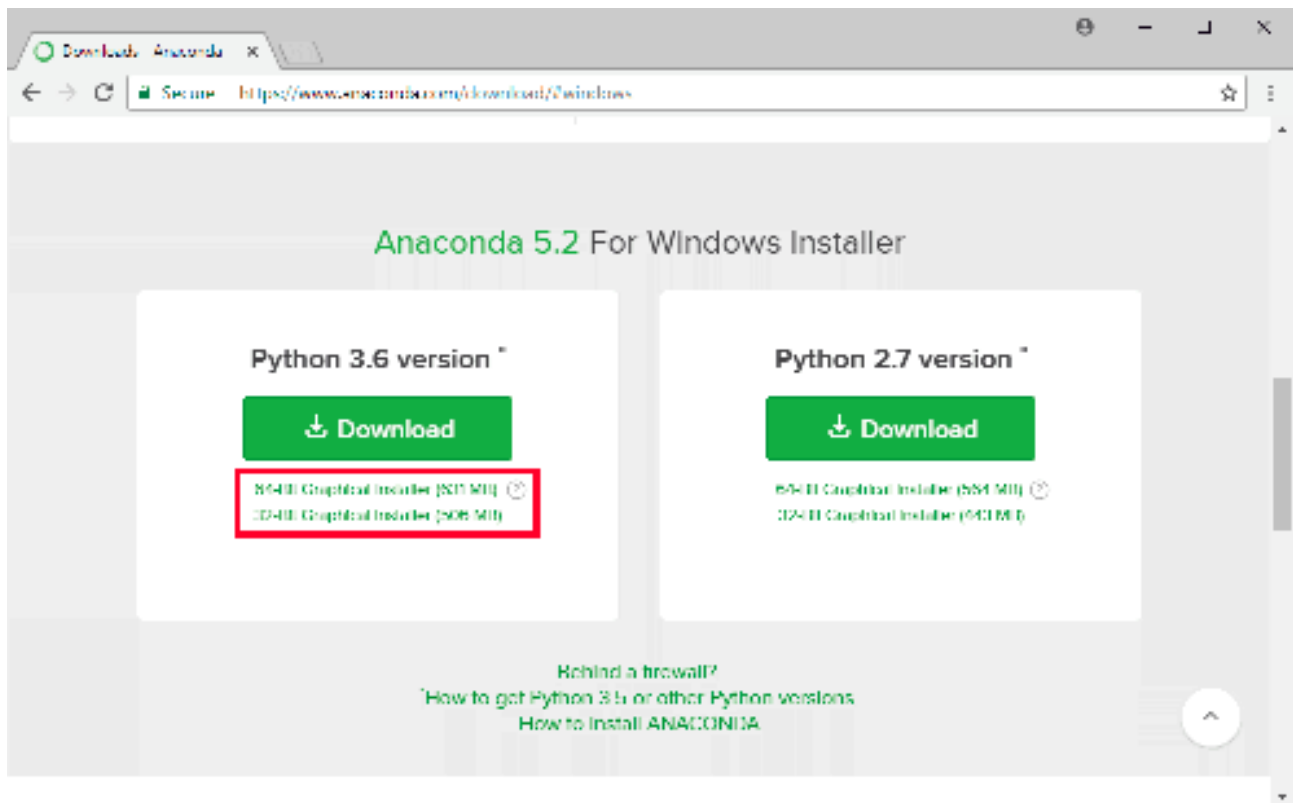
Step #1: Download

Head over to the [Anaconda for Windows download page](#).

[Verify your windows bit version](#) and click on the corresponding link.

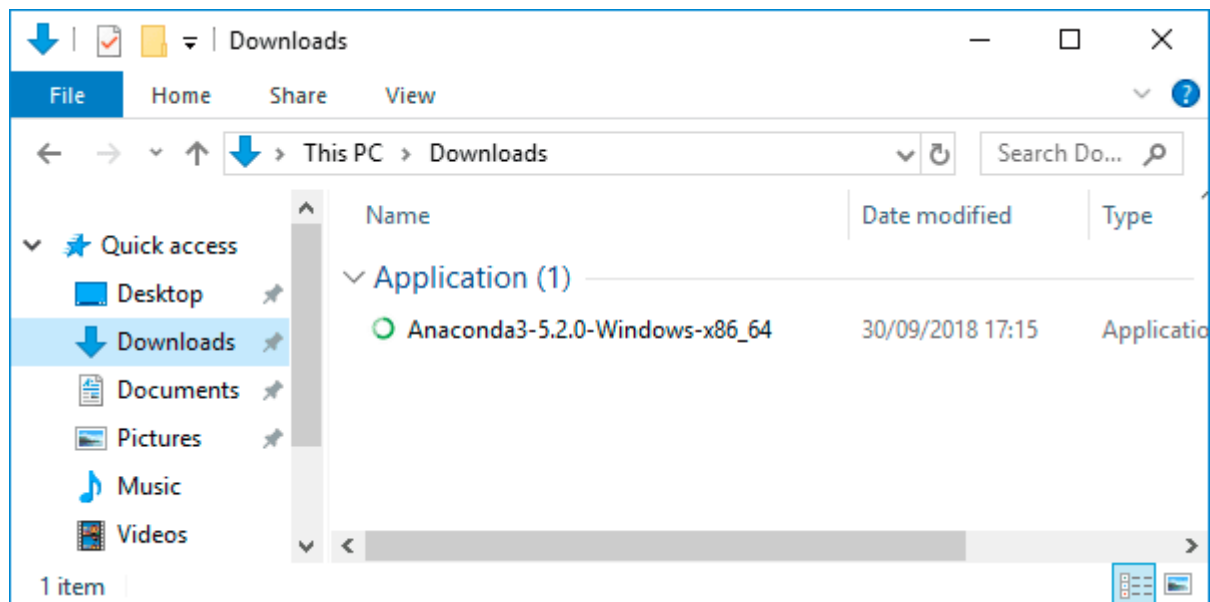
In this guide, we will download the 64-bit installer.

At the time of writing the latest stable Anaconda release was version 5 . 2 . 0 .



Wait for the download to complete.

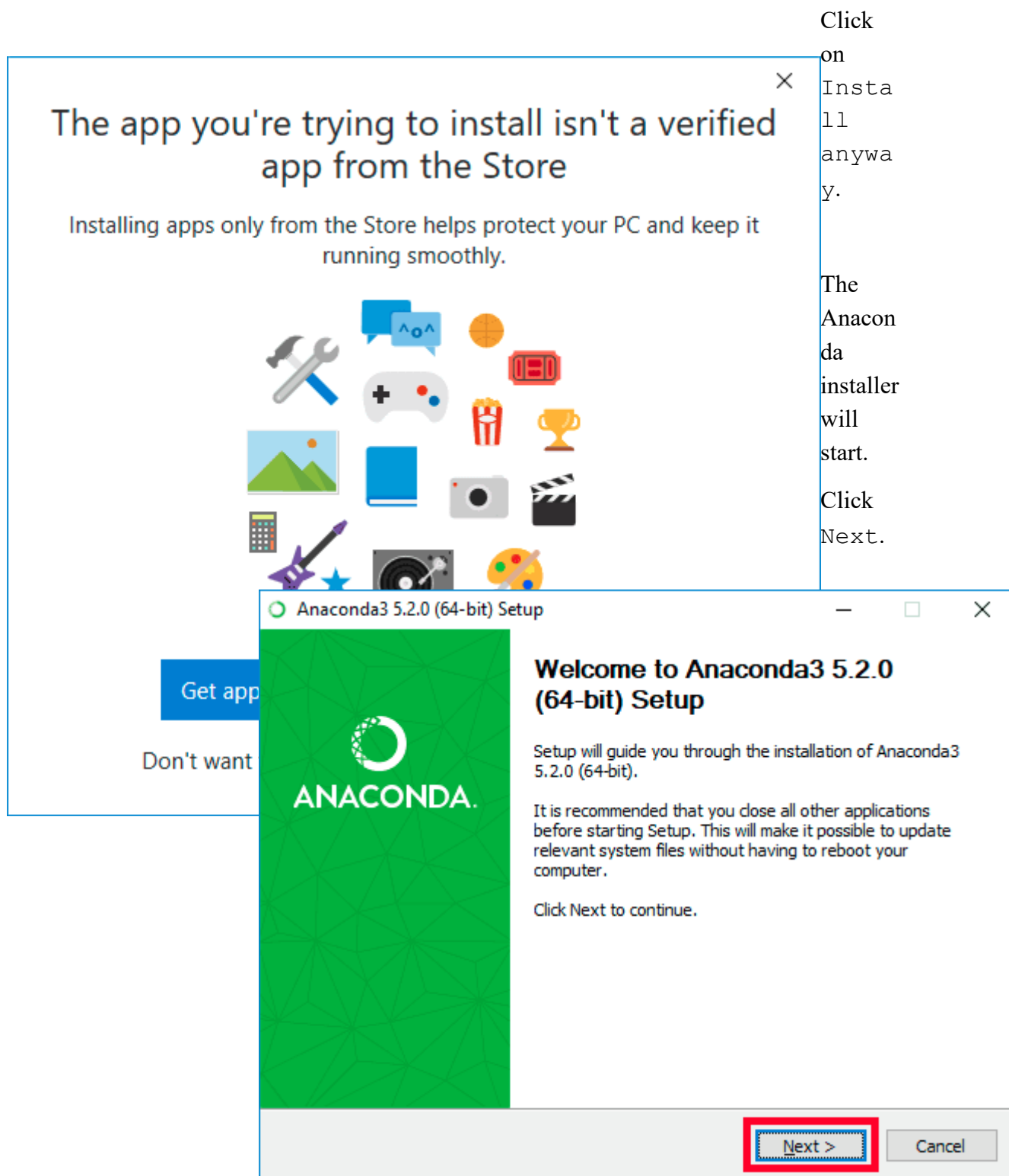
Step #2: Install



Open the location of the downloaded executable.

Double-click it to run the installer.

On Windows 10 a pop-up window will appear: The app you're trying to install isn't a verified app from the Store

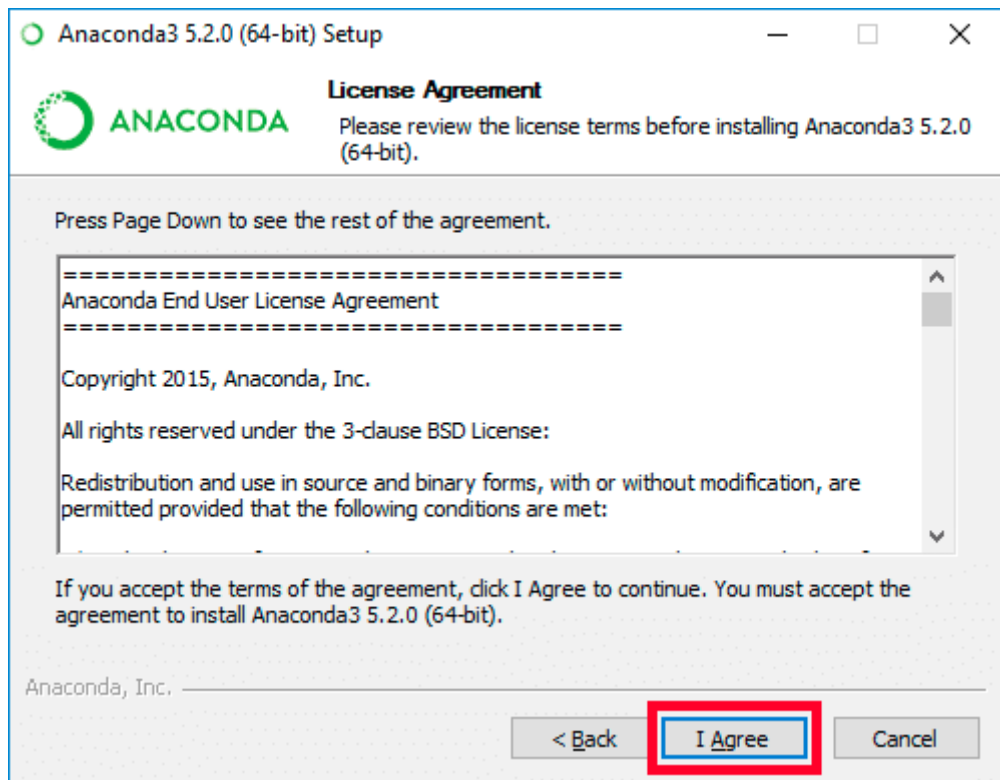


Click on Install anyway.

The Anaconda installer will start.

Click Next.

Click on I Agree to accept the license agreement.

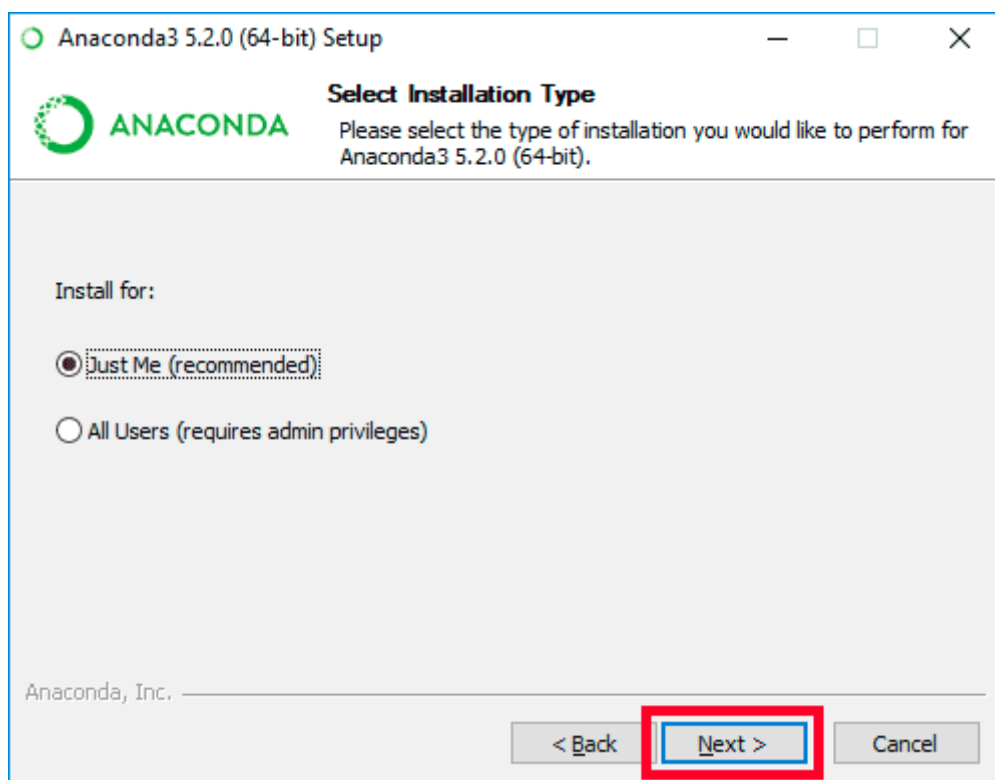


Select if you want to install for the current user or all users on the system. Installing for all users requires Windows

Administrator privileges.

In this tutorial, we keep the recommended setting of Just Me.

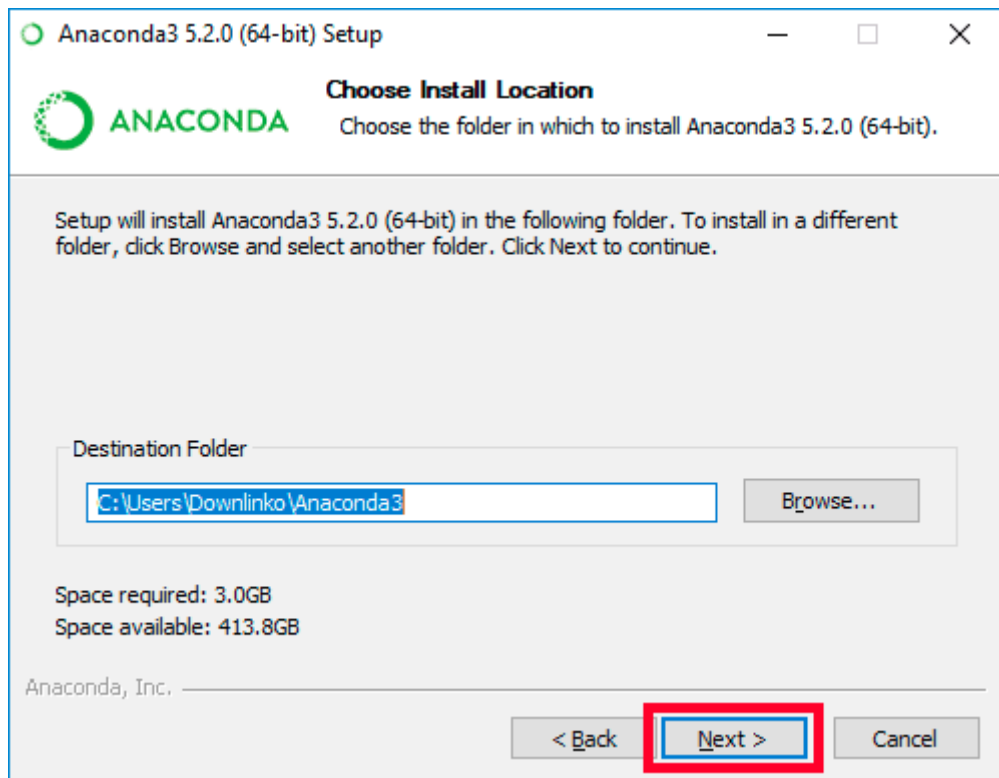
Click Next.



You can change the installation location by

clicking on the Browse... button.

Do not install Anaconda in a directory that contains spaces or special characters.



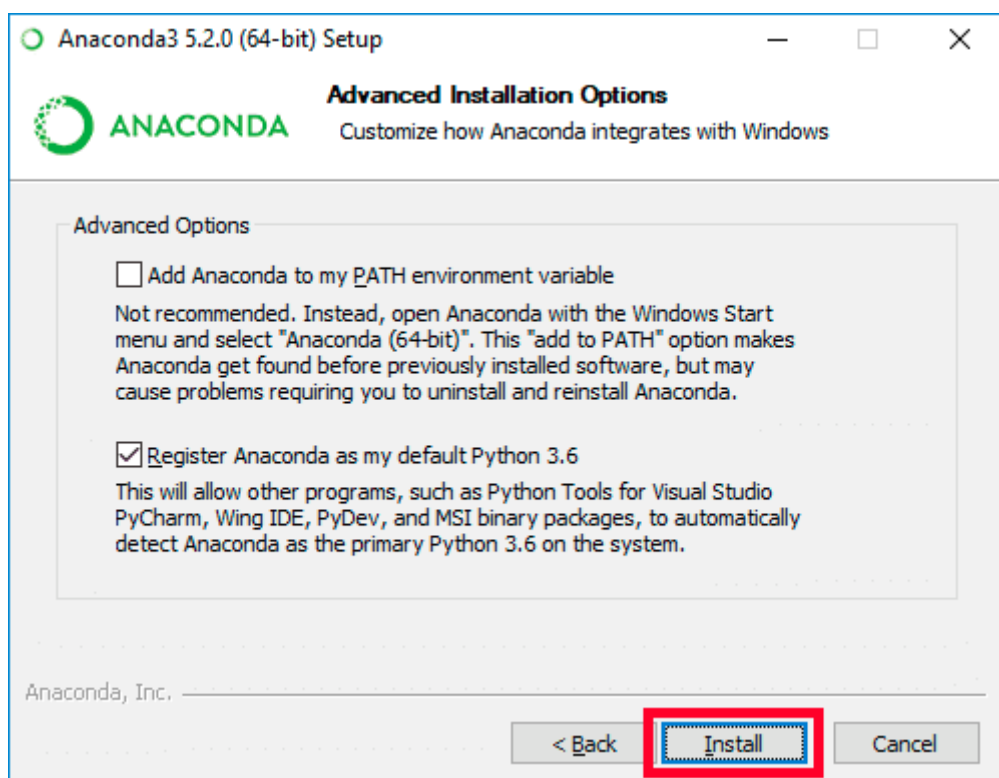
For this example, we keep the default install location in the user's home folder.

Choose if you want to add Anaconda to your PATH environment variable.

We recommend that you do not add Anaconda to the PATH environment variable. The reason for this is that it can interfere with other software.

Choose whether you want to register Anaconda as your default Python environment.

Leave the Register Anaconda as my default Python 3.6 box checked. Unless you plan on installing and running multiple versions of Anaconda. Or in case you need to use multiple versions of Python.



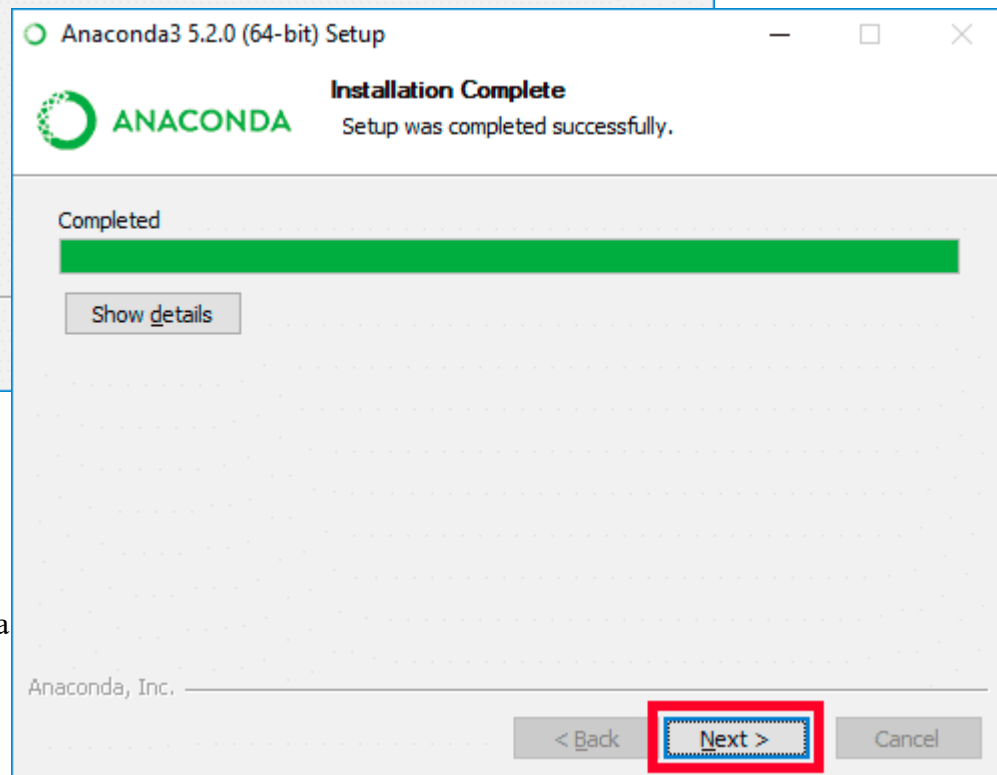
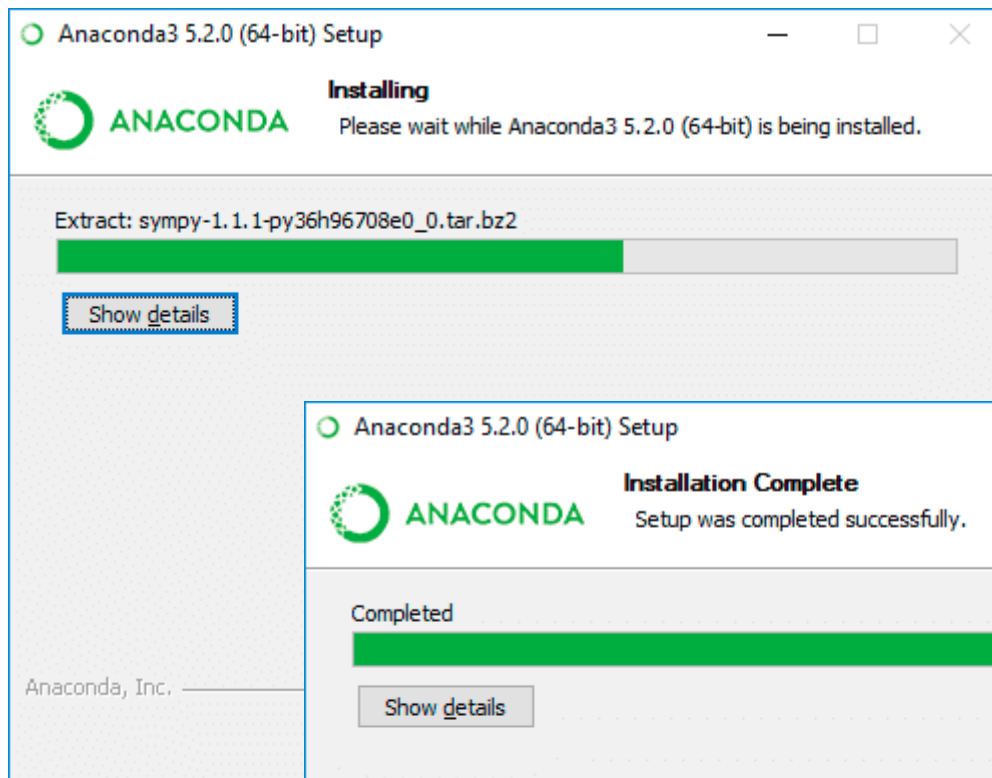
Click Install to start the installation.

The Anaconda installation will now start.

A progress bar shows the various steps that

are
executed.

Once the
installation
is
complete,
click
Next.

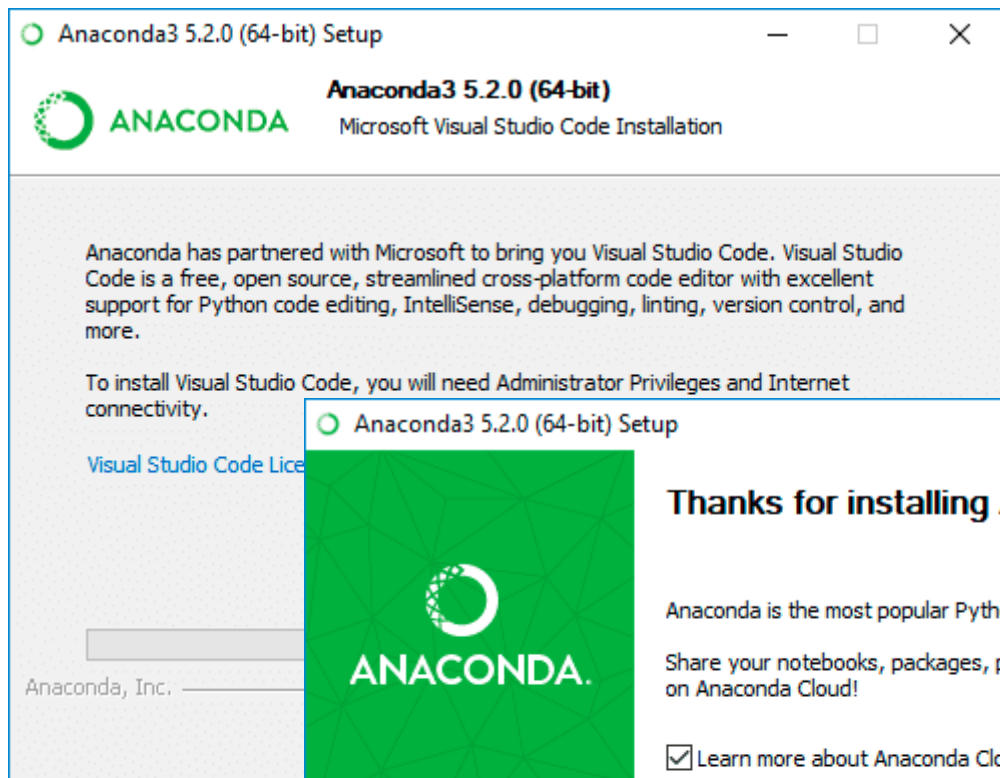


You can now also install the
Microsoft Visual Code editor.
This is an optional step.

In this guide, we install Anaconda
without Microsoft VSCode.

Click Skip.

Check following post for a
detailed guide on [how to install Visual Studio Code on Windows 10](#).

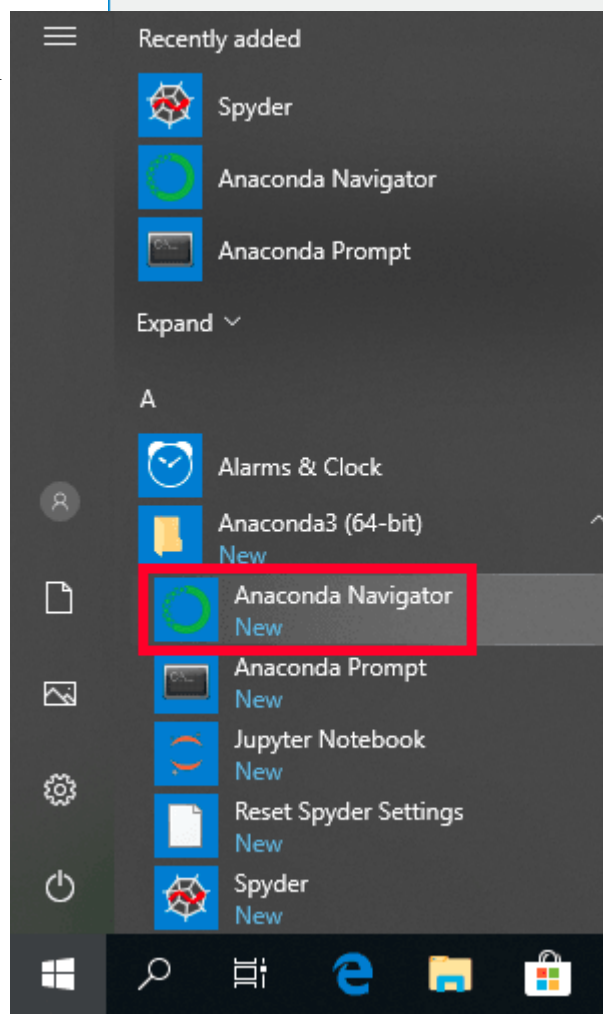


Click
Finish
to
complete
the
installation

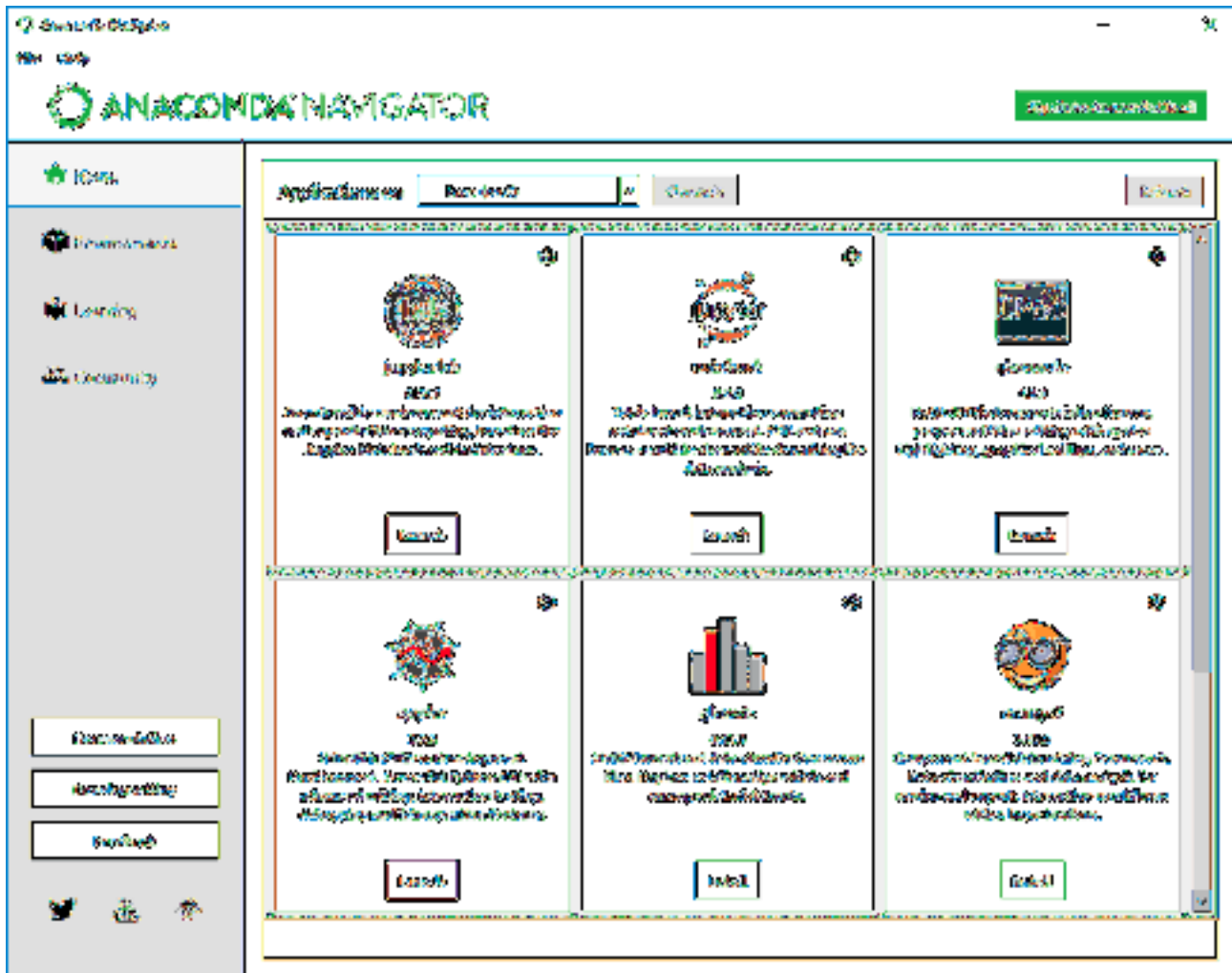
Step #3: Run

Let's verify the installation.

Click on the Windows button and look for Anaconda menu item. Open it and click on



the Anaconda
Navigator shortcut.



Navigator should now open as shown below.

Congratulations, you have installed Anaconda on Windows 10!

Deployment

The people in the current world tend to face a lot of problems regarding Energy Usage.

With the reduction in sources available for production of Energy , it is vital for the people to find out ways of reducing energy losses!

By allowing people to know the areas of energy wastage , an awareness can be created in order to know how they are supposed to reduce the loss.

Built With

- PYTHON --- language in which the machine learning code is built-in
- HTML --- for webpage designing

- PHP--- extracting user inputs and displaying them in a tabular formation
- XAMPP --- for running php scripts
- SPYDER--- IDE for running python code

Version

PYTHON 3.7 VERSION

Conclusion

By this project , we aim at bringing into notice , the importance of Energy Usage in a Household and ways of reducing it.