

Installation and Set up

for Python Programming course at ECPR winter school 2020

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1 Introduction

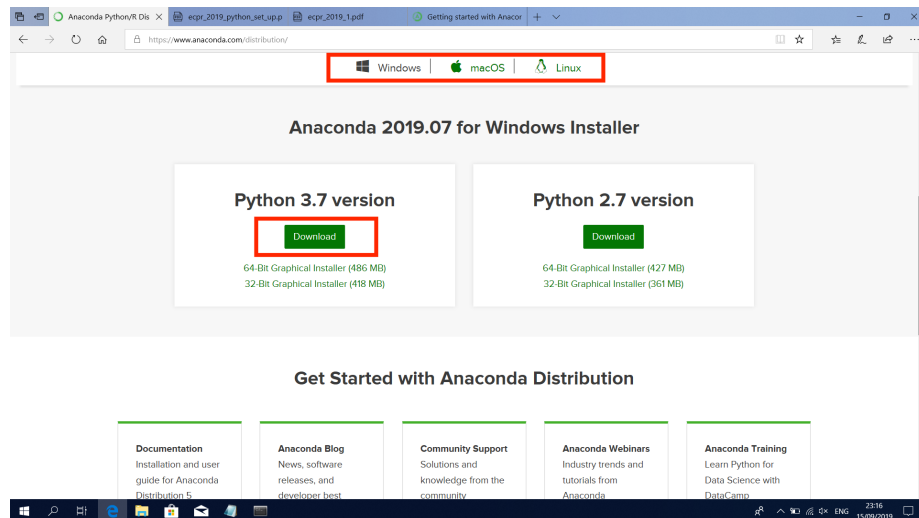
Here, I explain how to (1) install Python via Anaconda, (2) install PyCharm and configure conda environment, and (3) install two Python libraries which will be used in the course.

In case you are an experienced Python programmer, so you already installed Python and an editor, read section 5.

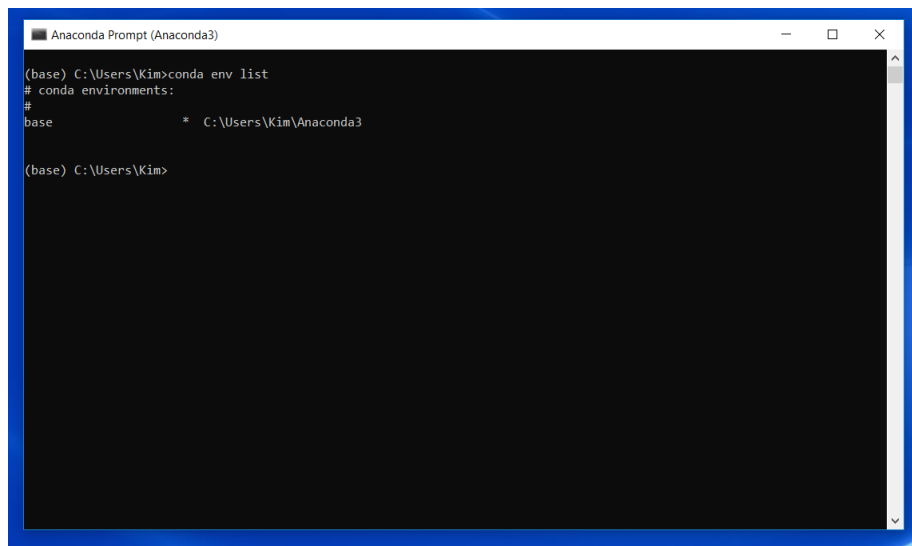
2 Anaconda

There are several ways to install Python, here we use Anaconda.

1. Visit Anaconda: <https://www.anaconda.com/download/>
2. Download and install Python 3.7 version which corresponds to your operating system (e.g., Windows, Mac, or Linux). Follow the installation instructions.



Then, let's check if Anaconda installed successfully. If you are a Mac user, open **Terminal**, if you are a Windows user, open **Anaconda Prompt**. Please type `conda env list`.¹ It should display your conda environments. At this moment only **base** environment is displayed since you didn't create any new environment. The address, `C:\Users\Kim\Anaconda3` is where the corresponding environment is stored. This information will be used to configure a conda environment at Pycharm. We will get back this point later in the next section.

A screenshot of a Windows command prompt window titled "Anaconda Prompt (Anaconda3)". The window has a blue border and standard Windows window controls (minimize, maximize, close). The text inside the window shows the command prompt at "(base) C:\Users\Kim>" followed by the command "conda env list". The output is "# conda environments:" followed by a list showing "base" as the active environment, located at "C:\Users\Kim\Anaconda3". The prompt then returns to "(base) C:\Users\Kim>".

```
(base) C:\Users\Kim>conda env list
# conda environments:
#
base                  *  C:\Users\Kim\Anaconda3

(base) C:\Users\Kim>
```

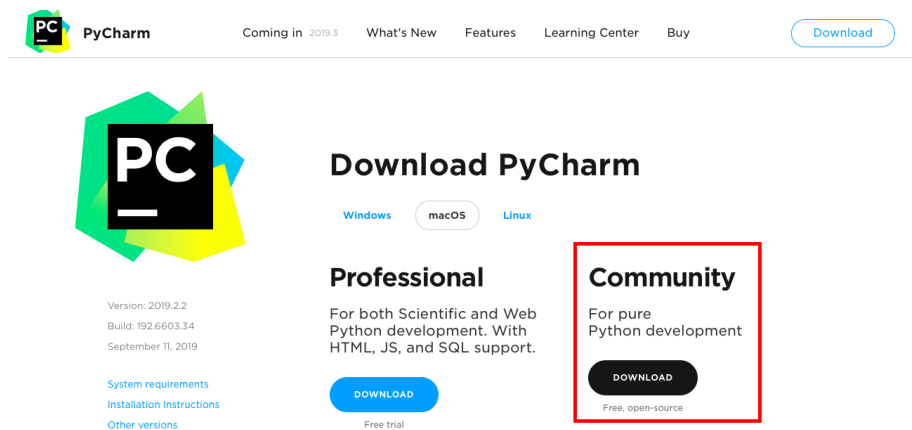
Anaconda Prompt (Windows example)

3 Pycharm

Installation

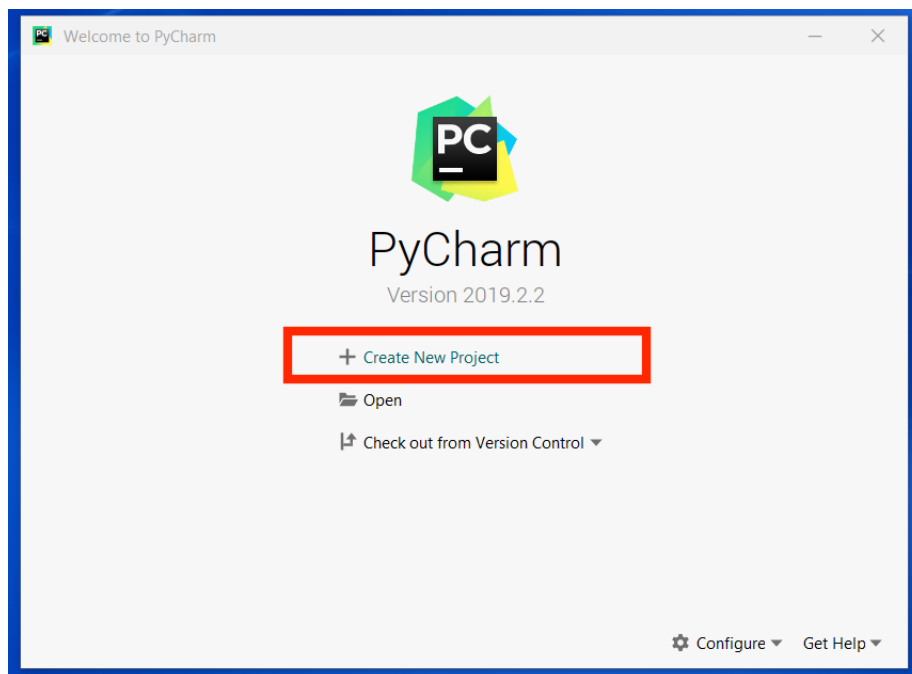
In this section, we install PyCharm, one of the most popular editors of Python. Please download and install **Community** version as it is free: <https://www.jetbrains.com/pycharm/download/>. Don't forget to choose the version corresponding your operating system. Follow the installation instruction.

¹You can find all the information about conda here: [Conda docs](#)



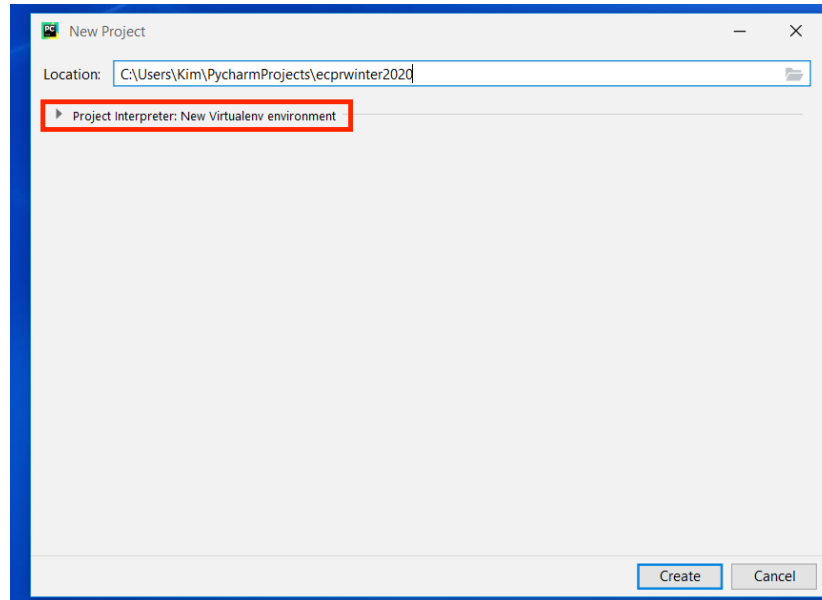
Configure a conda environment

Now we create a conda environment at PyCharm.² After you finish installation, open PyCharm and select **Create New Project**.

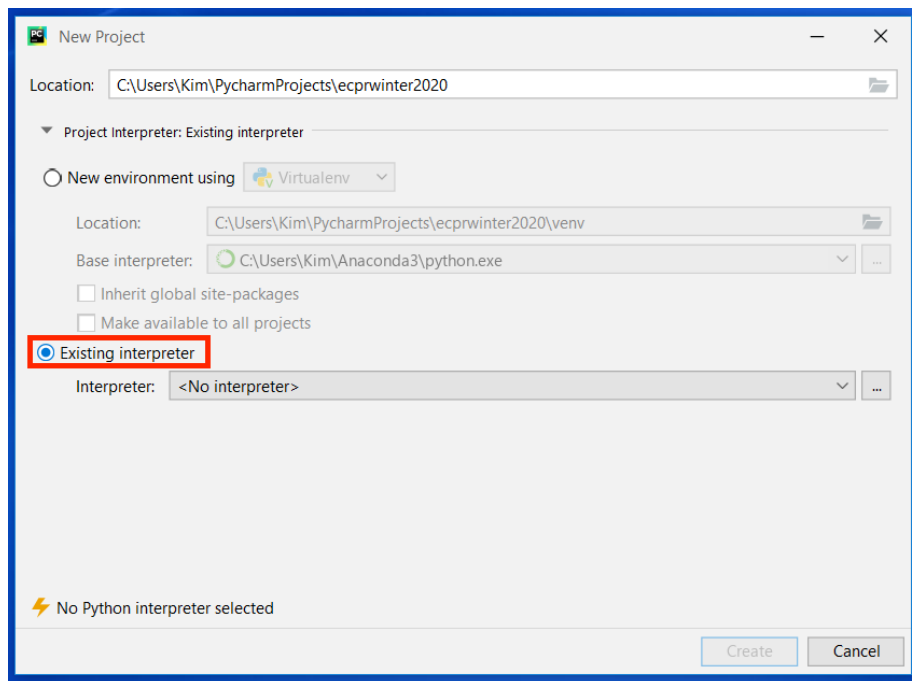


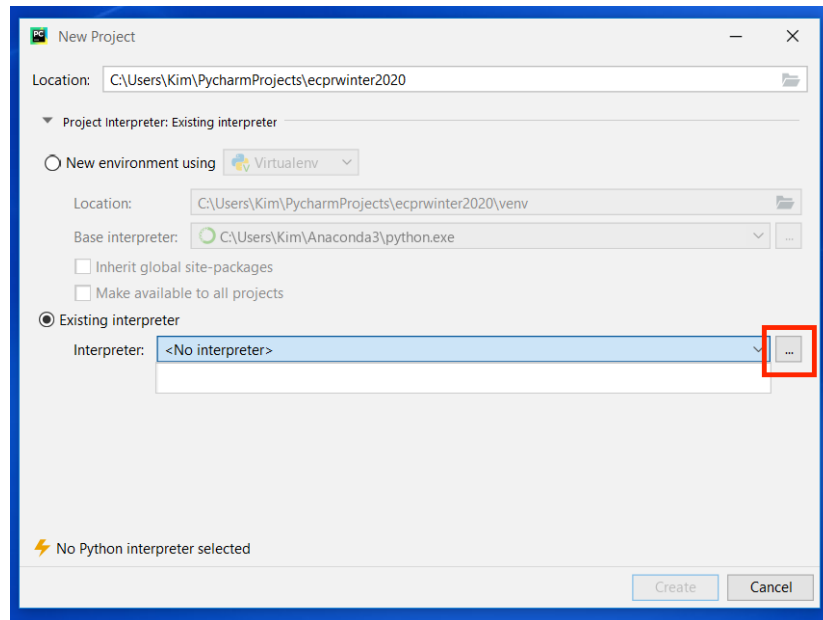
²PyCharm webpage explaining how to configure a conda environment: [Here](#)

Add project name, in this example **ecprwinter2020**, and click **Project Interpreter: New Virtualenv environment**.

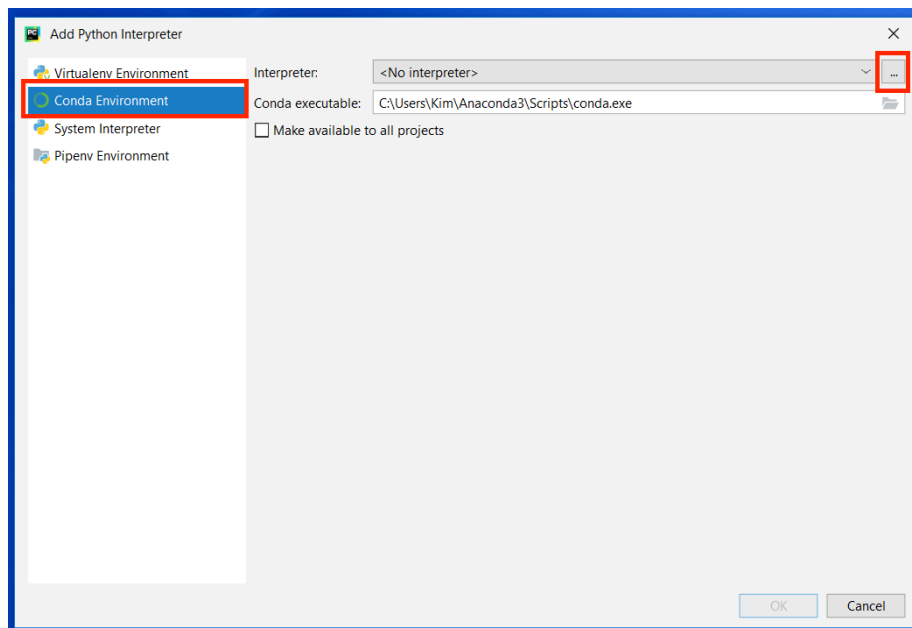


Select **Existing interpreter**, and click the button at right side of the interpreter section.





Select **Conda Environment** and click the button at right next to Interpreter section.

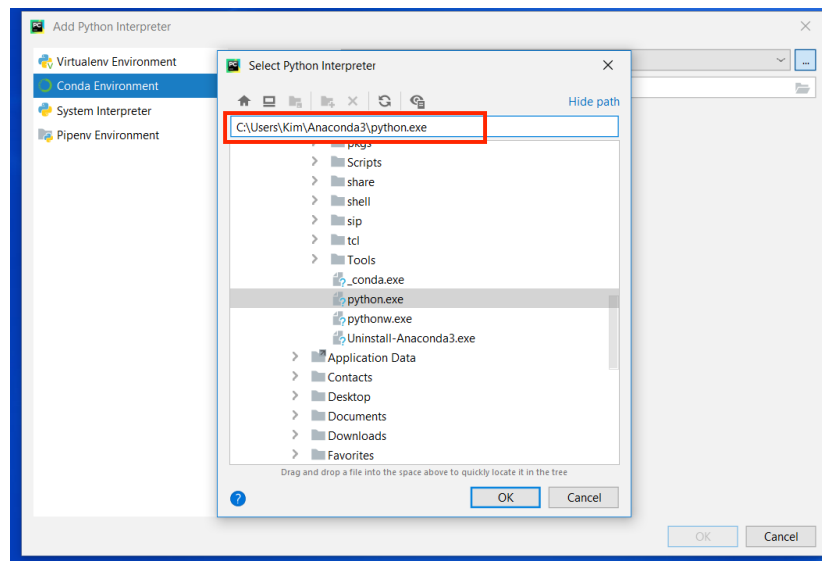


Now you have to let PyCharm know where your Python interpreter is. We want to use the one which is stored at an Anaconda environment. In

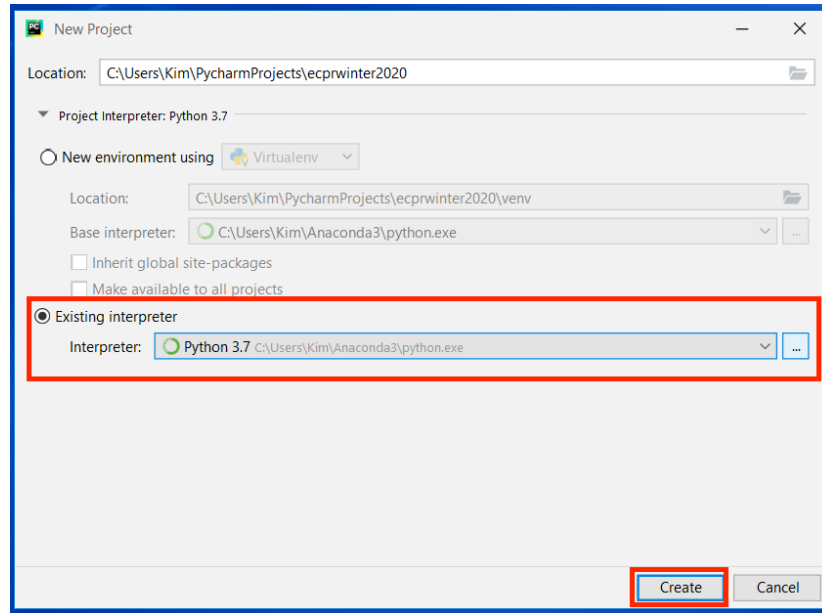
this example, we use an interpreter of **Base** environment. The address is `C:\Users\Kim\Anaconda3` as we have checked before. Select

`C:\Users\Kim\Anaconda3\python.exe`

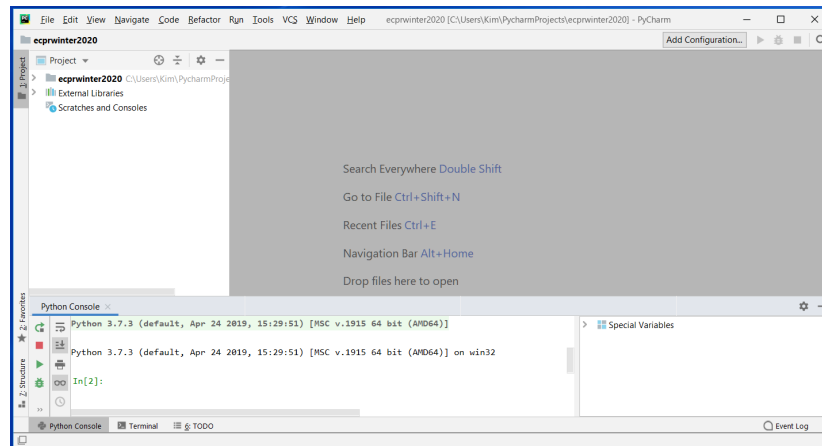
to indicate the interpreter of this environment. Select **Make available to all projects** and click **OK**.



Now you will see the interpreter you have just selected. Click **Create**.



If you see following window, you are successfully finished configuration.



4 Install Python Libraries

Now let's install two Python libraries, `requests-oauthlib` and `progress`, into the **Base** environment.³ First, open **Terminal** or **Anaconda Prompt** and type following command. Note that it is a **hyphen** between two words `requests` and `oauthlib`.

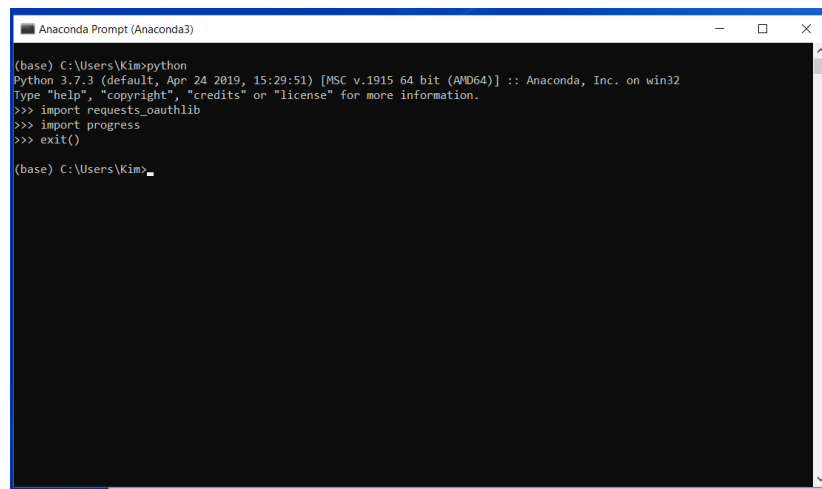
```
conda install requests-oauthlib progress
```

Now let's check if two libraries are installed successfully by using Python console. Following command execute Python.

```
python
```

Next, type following command. Note that it is a **underscore** between two words `requests` and `oauthlib` (not hyphen!).

```
import requests_oauthlib
import progress
```

A screenshot of the Anaconda Prompt (Anaconda3) window. The title bar reads "Anaconda Prompt (Anaconda3)". The terminal shows the following text: (base) C:\Users\Kim>python, Python 3.7.3 (default, Apr 24 2019, 15:29:51) [MSC v.1915 64 bit (AMD64)] :: Anaconda, Inc. on win32, Type "help", "copyright", "credits" or "license" for more information., >>> import requests_oauthlib, >>> import progress, >>> exit(), (base) C:\Users\Kim>.

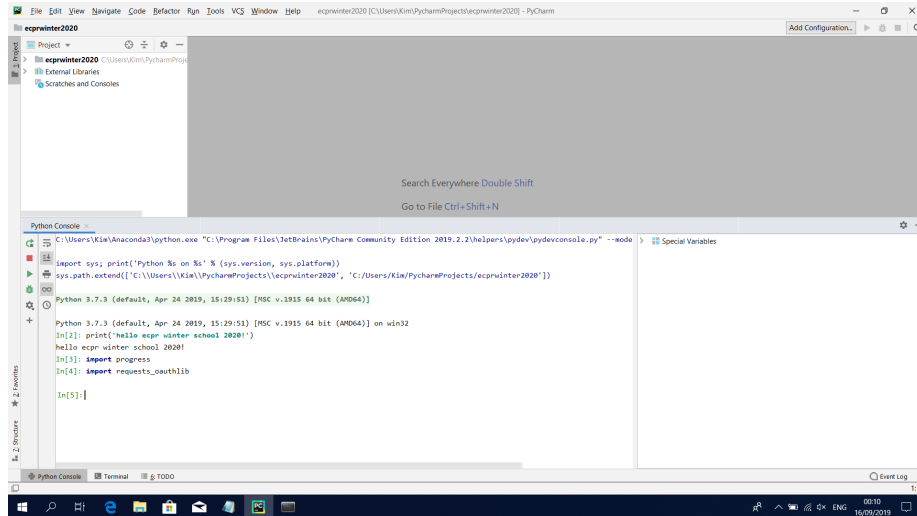
If there is no error message, two libraries are installed correctly. Finally, let's check if this change reflected in PyCharm. Open PyCharm project you have just created in the previous section and type following command at **Python Console**.

```
import requests_oauthlib
```

³Conda documentation how to manage conda environment: [here](#)


```
import progress
```

There should be no error message, if you configured correctly.



5 If you are an experienced Python programmer...

In this case, I assume that you already have Python and an editor in your environment. Also, you are capable of...

- Install libraries
- Create virtual environment with different Python version or libraries

In this case, you don't need to follow the instructions. Just make sure that you have Python > 3.5 and install libraries introduced in section 4. You can also choose an editor you want to use. But note that the course examples are given using PyCharm editor and the course will not take care of other editor's trouble shootings.