# Setting up your computer

If you aren’t already setup with Python and Jupyter Notebook or JupyterLab please install either Anaconda or MiniConda. For ease, I would recommend installing Anaconda. Anaconda is a big application but is much more user-friendly – it is large because it installs almost every Python module you will ever need in addition to a nice User Interface. MiniConda is less user friendly but much lighter (basically installs Python and Conda for managing packages). With MiniConda you will likely need to import additional modules as you go. Although less user friendly, using MiniConda gives a user more control and is more suited to developers. Instructions for installing Anaconda and MiniConda are below.

## First, download the data and notebook

Go to … and download the `Bootcamp.ipynb` and `requirements.txt` file and add them to an empty project folder called `PythonBootcamp`

## Next install either MiniConda or Anaconda

**MiniConda**

*If you already have MiniConda installed, skip to step 2. If you want to use Anaconda instead of MiniConda skip this section*

1. If you haven’t already got MiniConda please install MiniConda it for Python 3.7 from https://docs.conda.io/en/latest/miniconda.html (keep all default options)
2. Once installed, open `anaconda prompt (miniconda3)` by pressing the Windows button and searching ` anaconda prompt`.
3. Navigate to the `PythonBootcamp` directory using `cd` commands
4. Once in the Python directory run the command `conda install -c conda-forge --file requirements.txt -y` from the anaconda prompt to install all modules required during this bootcamp - this may take some time. If you get the error 'CondaHTTPError: HTTP 000 CONNECTION FAILED ...' see the **EY network issue**… below.
5. Run the command `jupyter lab`. This should open a new browser running [JupyterLab](https://jupyterlab.readthedocs.io/en/stable/). You can use either JupyterLab or Jupyter Notebook (by running `jupyter notebook`), JupyterLab is just a better version of Jupyter Notebook (in my opinion).

**Anaconda**

*If you already have Anaconda installed, skip to step 2.*

1. Install Anaconda for Windows and Python 3.7 from https://www.anaconda.com/distribution/#windows (install the 'Graphical Installer' to avoid compilcations opening .pkg files). Follow the installation instructions and keep everything as-per the default.
2. Open the `anaconda prompt (anaconda3)` by pressing the Windows button and searching `anaconda prompt` and run the command: `conda install -c conda-forge wordcloud -y` from the anaconda prompt to install all modules required during this bootcamp. If you get the error 'CondaHTTPError: HTTP 000 CONNECTION FAILED ...' see the **EY network issue...** below.
3. Open the `anaconda navigator (anaconda3)` by pressing the Windows button and searching `anaconda navigator`. Launch a JupyterLab session. This should load a UI in your default browser. On the left panel navigate to the `PythonBootcamp` directory and open the file `Bootcamp.ipynb`

**EY network issue...**

If you are getting the error 'CondaHTTPError: HTTP 000 CONNECTION FAILED ...' this is because the EY network is blocking the Anaconda (and pip) online repo. To get around network issues, we use the EY proxies. These are set as environement variables during a session by running the two command below in the anaconda prompt:

SET http\_proxy=http://empweb2.ey.net:8080

SET https\_proxy=https://empweb2.ey.net:8443

Once set commands such as `conda install <module>` should work. Unfortunetly you will have to set these variables every time you open a new session (open a new Anaconda Prompt).