Installing Tensorflow:

You will need to *install Tensorflow before coming to the tutorials*. There are various options for how to install Tensorflow (see various options <u>here</u>), but a recommended way is to use Anaconda. Here are the step-by-step instructions:

- 1. Download the Python 3.7 version of Anaconda from here.
- 2. Open a terminal window using, for example, the Terminal program on a Mac computer. OR Open the Anaconda Navigator and click on "Environments". Then click on the triangle next to the word "root" and select "Open Terminal".
- 3. Create a virtual environment called "tensorflow" by typing into the terminal:
 - o conda create -n tensorflow pip python=3.6
 - source activate tensorflow
 - o pip install --ignore-installed --upgrade packageURLpip install --upgrade tensorflow
 - o pip install --upgrade matplotlib

where packageURL is the url found here (depends on your type of computer)

- 4. Test that everything worked by typing the following commands into the terminal. If everything worked properly, you will not get any error messages.
 - pythonw
 - import tensorflow
 - o import matplotlib.pyplot as plt
- 5. If you are familiar with running code from a terminal, then you can stop here. Otherwise, do the following:
 - Close the terminal.
 - Open the Anaconda Navigator and click on "Home".
 - From the dropdown menu labelled "Applications on", select "tensorflow"
 - Click the "Install" button in the "Spyder" box