Markov Chain Monte Carlo Exploration

Step 1. Installation of Anaconda

We'll be using an ipynotebook to guide our work, and to work with those we'll need Jupyter Lab, as integrated in Anaconda environments.

Install anaconda from here: https://docs.anaconda.com/free/anaconda/install/index.html according to your operating system

Step 2. Create new virtual environment

Once you've finished installing anaconda, open the anaconda terminal.

If you're on mac/linux, you can open a standard terminal.

If you're on Windows, search for anaconda in your windows search bar, and open the anaconda terminal.

Creation of new environments is described here: https://conda.io/projects/conda/en/latest/user-guide/tasks/manage-environments.html#activating-an-environment

Create new environment with

```
:~$ conda create --name <env name here>
```

Step 3. Install dependencies

We need three core libraries to use this notebook, but each will install its own dependencies as well. The three are: JupyterLab, Numpy, and MatPlotLib

FIRST, activate the environment you just created by calling

```
~$ conda activate <env name here>
```

Once you've activated your venv, install your libraries with the following calls:

```
:~$ conda install -c conda-forge jupyterlab
```

Select Y for yes, to complete install. Repeat for

```
:~$ conda install -c conda-forge matplotlib
```

```
:~$ conda install numpy
```

Step 4. Download the ipynotebook and the supporting data

The files can be found here:

https://github.com/MorganaFayeIacocca/Astronomer-For-a-Day-2023

Download them and move them into a separate folder somewhere on your Desktop, in your documents directory, or somewhere else you know how to access

Step 5. Start Jupyter

If it's not active already, launch your anaconda terminal and activate your virtual environment

Navigate to the folder containing the files you just downloaded using the cd command:

```
~$ cd Documents/<folder name>
```

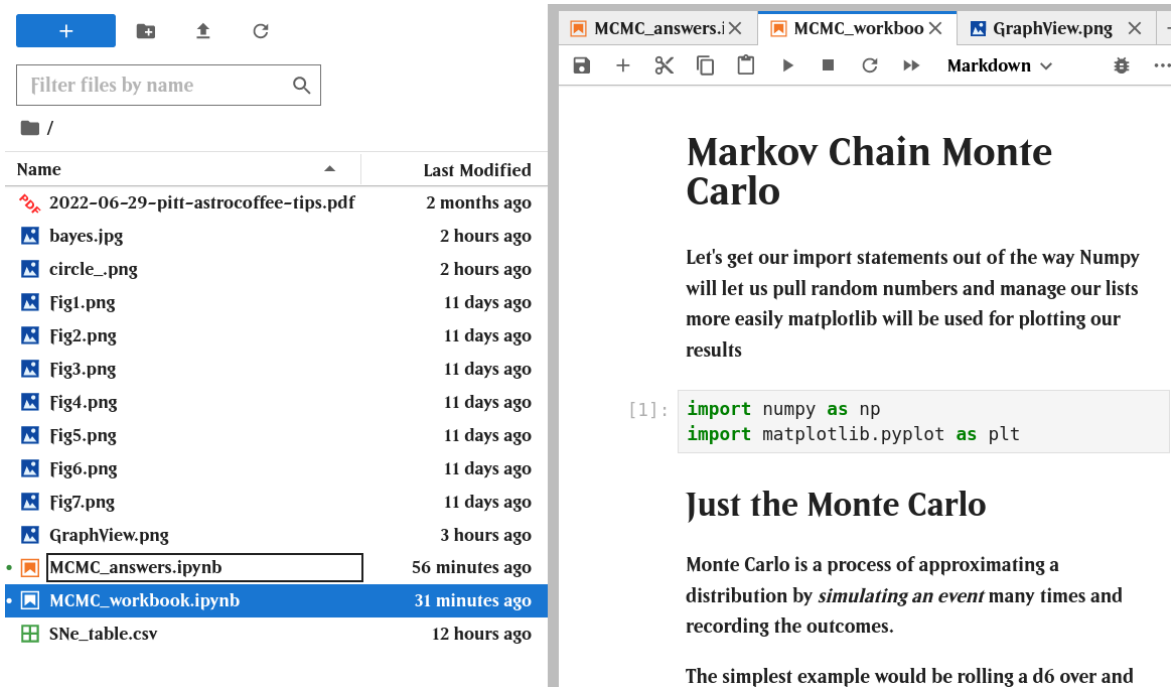
Replace my path above with the path to the folder you created

Once there, run

```
~$ jupyter lab
```

And wait for your browser to load the application

If done correctly, you should see the files in the directory browsers on the left hand side of the application



If you get here, stop and help others near you.