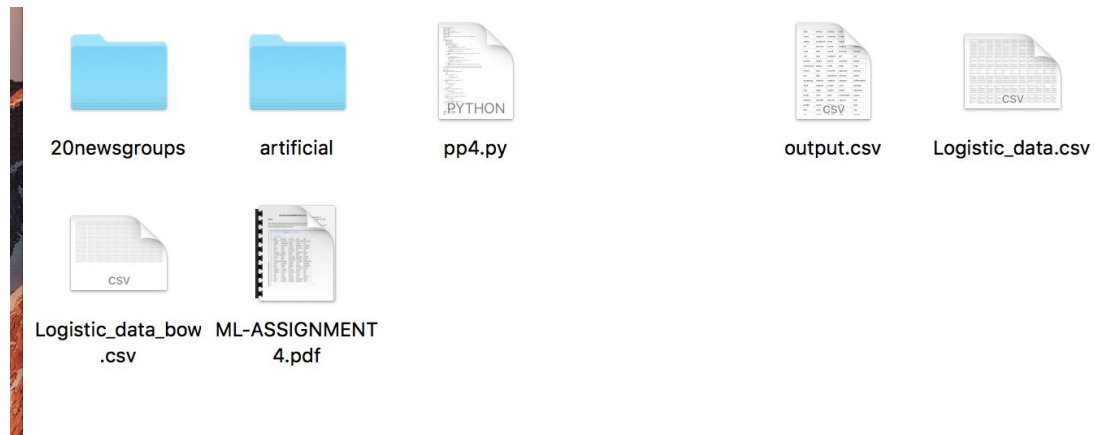


To run this program all we have to make sure is the pp4.py file is in the same directory as the 20newsgroups and artificial as shown in the below image.



To run the code we just have to run the following line in the terminal.

Python3 ./pp4.py