**Installing Python3 and Various Packages**

Python is a programming languages used widely for software development and data analysis. The most recent distribution is Python 3.6, which is what we will be using. Some of the syntax in Python 3 is different from previous distributions—we will be working exclusively with Python 3.

Additionally, programmers have created many useful Python packages, such as matplotlib, scipy, and nltk, which can really enhance the experience of working with Python. We will install matplotlib and nltk for this workshop.

The installation of Python3 and various packages is different for Mac and Windows. The python3 installation includes pip, which allows us to install various packages, as well as IDLE, which is a simple text editor. After you are done installing by following the Mac or Windows instructions below, try opening IDLE and writing a simple script. Open IDLE. Then, go to File 🡪 New File. Type the following:

print (“Hello World!”)

Go to Run 🡪 Run Module. You will be prompted to save the file. Now your simple script should be running in the IDLE command line!

**Basic Installation Instructions for Mac users:**

1. Install homebrew (<https://brew.sh/>) by entering the following command in the command line:

/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"

1. Use homebrew to install python3, by entering the following line in the command line:

brew install python3

1. Python3 automatically includes pip, which allows us to install various packages. The following lines work for any python package. Enter the following two lines into your terminal to install matplotlib and nltk:

pip3 install nltk

pip3 install matplotlib

**Basic Installation Instructions for Windows users:**

1. Download the most recent version of python from the following site: <https://www.python.org/downloads/>
2. You may need to restart your computer after installing python3. Python3 includes pip in the installation, which allows us to download python packages. Enter the following commands in the command line

py -m pip install matplotlib

py -m pip install nltk