Install Pandas, NumPy and MatPlotLib on CentOS 7

For data processing in Python, Pandas and NumPy are super useful. Before installing Pandas and NumPy, you should have pip on your CentOS 7.

Installing Pandas by pip on CentOS 7

If you have pip installed on your Centos 7, you can simply install Pandas like below:

```
# pip install pandas
DEPRECATION: Python 2.7 will reach the end of its life on January 1st, 2020. Please upgrade your Python as
Python 2.7 won't be maintained after that date. A future version of pip will drop support for Python 2.7. More
details about Python 2 support in pip, can be found at https://pip.pypa.io/en/latest/development/release-process
/#python-2-support
Collecting pandas
 Downloading https://files.pythonhosted.org/packages/db/83
/7d4008ffc2988066ff37f6a0bb6d7b60822367dcb36ba5e39aa7801fda54/pandas-0.24.2-cp27-cp27mu-manylinux1_x86_64.whl
(10.1MB)
     || 10.1MB 507kB/s
Collecting pytz>=2011k (from pandas)
 Downloading https://files.pythonhosted.org/packages/e7/f9
/f0b53f88060247251bf481fa6ea62cd0d25bf1b11a87888e53ce5b7c8ad2/pytz-2019.3-py2.py3-none-any.whl (509kB)
     || 512kB 15.8MB/s
Collecting numpy>=1.12.0 (from pandas)
 Downloading https://files.pythonhosted.org/packages/d7/b1
/3367ea1f372957f97a6752ec725b87886e12af1415216feec9067e31df70/numpy-1.16.5-cp27-cp27mu-manylinux1_x86_64.whl
(17.0MB)
     || 17.0MB 17.1MB/s
Collecting python-dateutil>=2.5.0 (from pandas)
 Downloading https://files.pythonhosted.org/packages/41/17
/c62faccbfbd163c7f57f3844689e3a78bae1f403648a6afb1d0866d87fbb/python_dateutil-2.8.0-py2.py3-none-any.whl (226kB)
     || 235kB 48.5MB/s
Collecting six>=1.5 (from python-dateutil>=2.5.0->pandas)
 Using cached https://files.pythonhosted.org/packages/73/fb
/00a976f728d0d1fecfe898238ce23f502a721c0ac0ecfedb80e0d88c64e9/six-1.12.0-py2.py3-none-any.whl
Installing collected packages: pytz, numpy, six, python-dateutil, pandas
Successfully installed numpy-1.16.5 pandas-0.24.2 python-dateutil-2.8.0 pytz-2019.3 six-1.12.0
```

Installing NumPy by pip on CentOS 7

```
# pip install numpy
DEPRECATION: Python 2.7 will reach the end of its life on January 1st, 2020. Please upgrade your Python as
Python 2.7 won't be maintained after that date. A future version of pip will drop support for Python 2.7. More
details about Python 2 support in pip, can be found at https://pip.pypa.io/en/latest/development/release-process
/#python-2-support
Requirement already satisfied: numpy in /usr/lib64/python2.7/site-packages (1.16.5)
```

In my case, NumPy is already installed, so the above message appeared.

Installing MatPlotLib by pip on CentOS 7

If you have pip installed on your Centos 7, you can simply install MatPlotLib like below:

```
# pip install matplotlib
DEPRECATION: Python 2.7 will reach the end of its life on January 1st, 2020. Please upgrade your Python as
Python 2.7 won't be maintained after that date. A future version of pip will drop support for Python 2.7. More
details about Python 2 support in pip, can be found at https://pip.pypa.io/en/latest/development/release-process
/#python-2-support
Collecting matplotlib
   Downloading https://files.pythonhosted.org/packages/32/6b
/0368cfa5eld1ae169ab7dc78addda3fd5e6262e48d7373a9114bac7caff7/matplotlib-2.2.4-cp27-cp27mu-manylinux1\_x86\_64.
whl (12.8MB)
         || 12.8MB 963kB/s
Requirement already satisfied: python-dateutil>=2.1 in /usr/lib/python2.7/site-packages (from matplotlib)
Collecting subprocess32 (from matplotlib)
   Downloading https://files.pythonhosted.org/packages/32/c8
/564be4d12629b912ea431f1a50eb8b3b9d00f1a0b1ceff17f266be190007/subprocess32-3.5.4.tar.gz (97kB)
        || 102kB 11.0MB/s
Collecting cycler>=0.10 (from matplotlib)
   Downloading https://files.pythonhosted.org/packages/f7/d2
/e07d3ebb2bd7af696440ce7e754c59dd546ffe1bbe732c8ab68b9c834e61/cycler-0.10.0-py2.py3-none-any.whl a continuous continuou
Requirement already satisfied: six>=1.10 in /usr/lib/python2.7/site-packages (from matplotlib) (1.12.0)
Collecting backports.functools-lru-cache (from matplotlib)
   Downloading https://files.pythonhosted.org/packages/03/8e
/2424c0e65c4a066e28f539364deee49b6451f8fcd4f718fefa50cc3dcf48/backports.functools_lru_cache-1.5-py2.py3-none-
Requirement already satisfied: pytz in /usr/lib/python2.7/site-packages (from matplotlib) (2019.3)
Collecting pyparsing!=2.0.4,!=2.1.2,!=2.1.6,>=2.0.1 (from matplotlib)
   Downloading https://files.pythonhosted.org/packages/11/fa
/0160cd525c62d7abd076a070ff02b2b94de589f1a9789774f17d7c54058e/pyparsing-2.4.2-py2.py3-none-any.whl (65kB)
        || 71kB 18.6MB/s
Requirement already satisfied: numpy>=1.7.1 in /usr/lib64/python2.7/site-packages (from matplotlib) (1.16.5)
Collecting kiwisolver>=1.0.1 (from matplotlib)
   Downloading https://files.pythonhosted.org/packages/3d/78
/cb9248b2289ec31e301137cedbe4ca503a74ca87f88cdbfd2f8be52323bf/kiwisolver-1.1.0-cp27-cp27mu-manylinux1\_x86\_64.
whl (93kB)
        || 102kB 42.8MB/s
Requirement already satisfied: setuptools in /usr/lib/python2.7/site-packages (from kiwisolver>=1.0.1-
>matplotlib) (40.6.3)
Installing collected packages: subprocess32, cycler, backports.functools-lru-cache, pyparsing, kiwisolver,
matplotlib
   Running setup.py install for subprocess32 ... done
Successfully installed backports.functools-lru-cache-1.5 cycler-0.10.0 kiwisolver-1.1.0 matplotlib-2.2.4
pyparsing-2.4.2 subprocess32-3.5.4
```