Install Sklearn

CISC7202

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Introduction to Sklearn

Sklearn Library

- Sklearn is short for scikit-learn and is a third-party module based on Python.
- Sklearn library integrates many common machine learning methods.
- When performing machine learning tasks, you don’t need to implement algorithms by yourself.
- You only need to call the modules provided in the sklearn library to complete most machine learning tasks.
- Sklearn library is based on Numpy, Scipy, and matplotlib, so you need to install these dependencies before you can install sklearn.

Numpy Library

- Numpy (short for Numerical Python) is an open source Python scientific computing library. Although the list container and the array module are provided in Python, these structures are not suitable for numerical calculation.
  - It is necessary to create common data structures (such as multidimensional arrays, matrices, etc.) and perform common scientific calculations by the Numpy library (Such as: matrix operation).
- Scipy is the basis of the sklearn library, a Python module based on Numpy that integrates multiple mathematical algorithms and functions. Its different submodules have different applications such as integration, interpolation, optimization and signal processing.
- Matplotlib is a Numpy-based Python toolkit that provides a number of data drawing tools for drawing statistical graphs and converting large amounts of data into more acceptable charts.

Install Sklearn

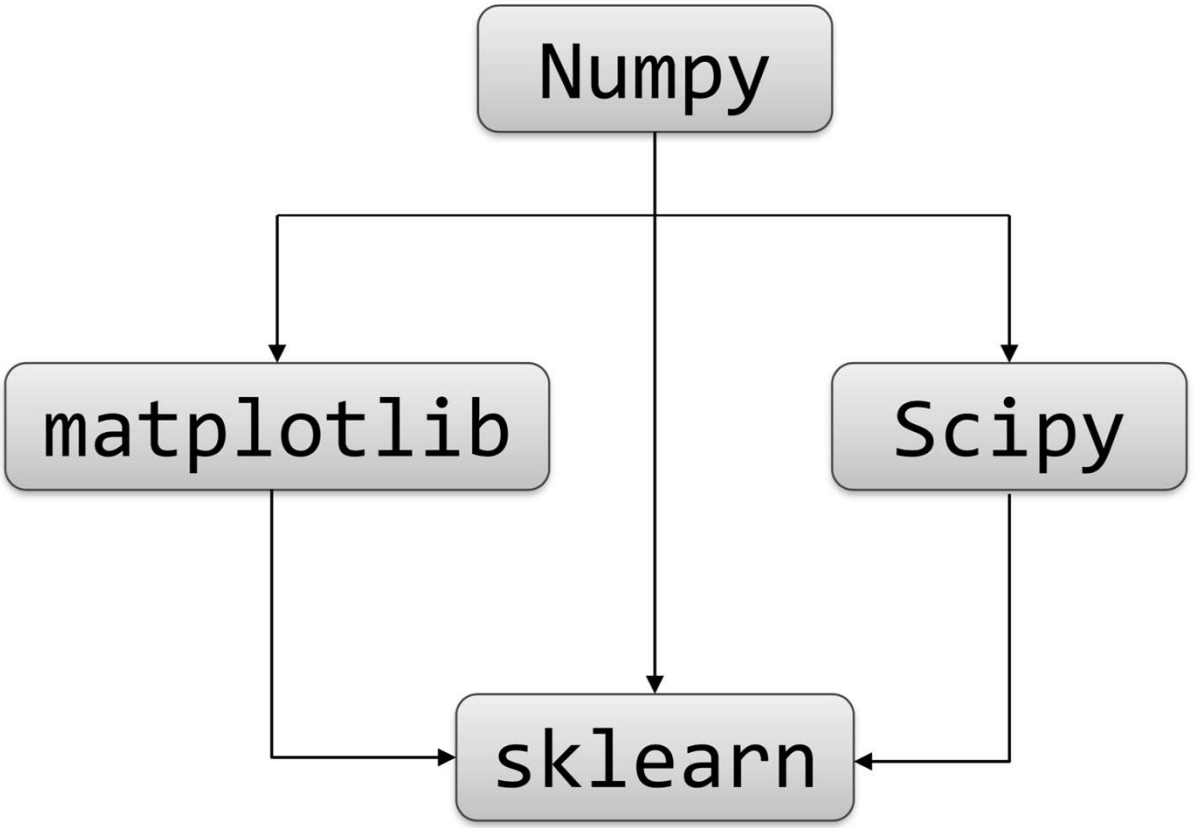
Download Package

Download webpage: http://www.lfd.uci.edu/~gohlke/pythonlibs/

Installation Order

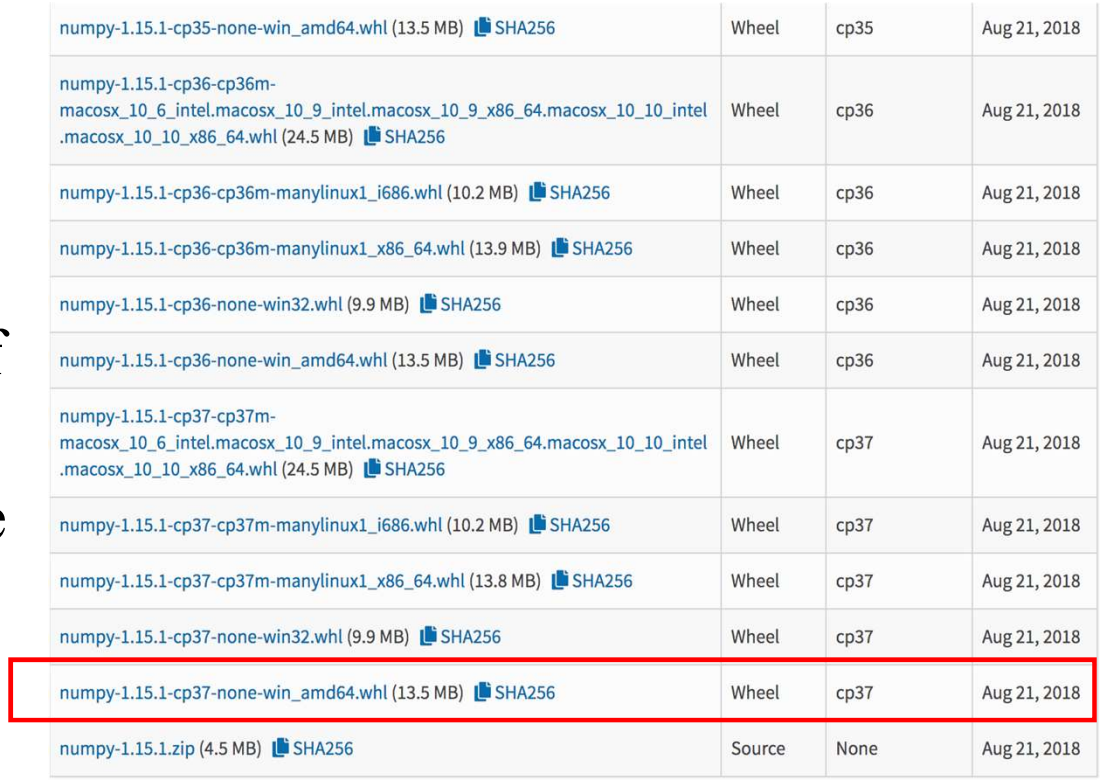
Installation order:

- Numpy Library
- Scipy Library
- Matplotlib Library
- Sklearn Library



Install Numpy

- Visit Numpy‘s download link: https://pypi.org/project/numpy/#files
- Download the corresponding file according to the specific version of Python.
- For example, if this course uses the 64-bit version of Python 3.7, download the win_amd64.whl file.



numpy-1.15.1-cp35-none-win_amd64.whl (13.5 MB) SHA256	Wheel	cp35	Aug 21, 2018
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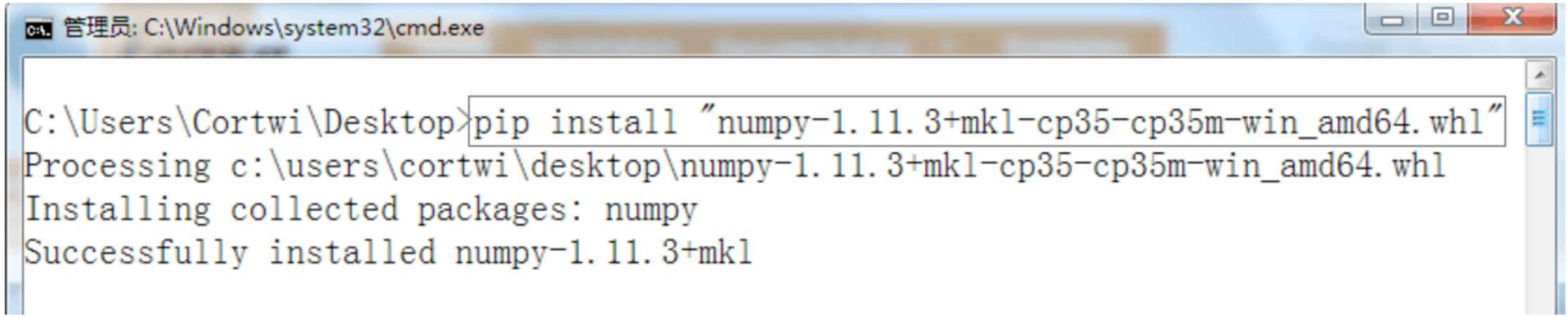
numpy-1.15.1-cp37-cp37m-manylinux1_i686.whl (10.2 MB) SHA256	Wheel	cp37	Aug 21, 2018
numpy-1.15.1-cp37-cp37m-manylinux1_x86_64.whl (13.8 MB) SHA256	Wheel	cp37	Aug 21, 2018
numpy-1.15.1-cp37-none-win32.whl (9.9 MB) SHA256	Wheel	cp37	Aug 21, 2018
numpy-1.15.1-cp37-none-win_amd64.whl (13.5 MB) SHA256	Wheel	cp37	Aug 21, 2018
numpy-1.15.1.zip (4.5 MB) SHA256	Source	None	Aug 21, 2018

Installing Numpy

- Find the path to the downloaded file, open DOS command line window at Windows, and execute the following command:

pip install numpy-1.15.1-cp37-none-win_amd64.whl

Installing Numpy



If no installation errors are prompted, the installation is successful.

Install Scipy

- Visit Scipy‘s download link: https://pypi.org/project/scipy/
- Download the corresponding file according to the specific version of Python. Also here you need to download the *win_amd64.whl file in the red box.

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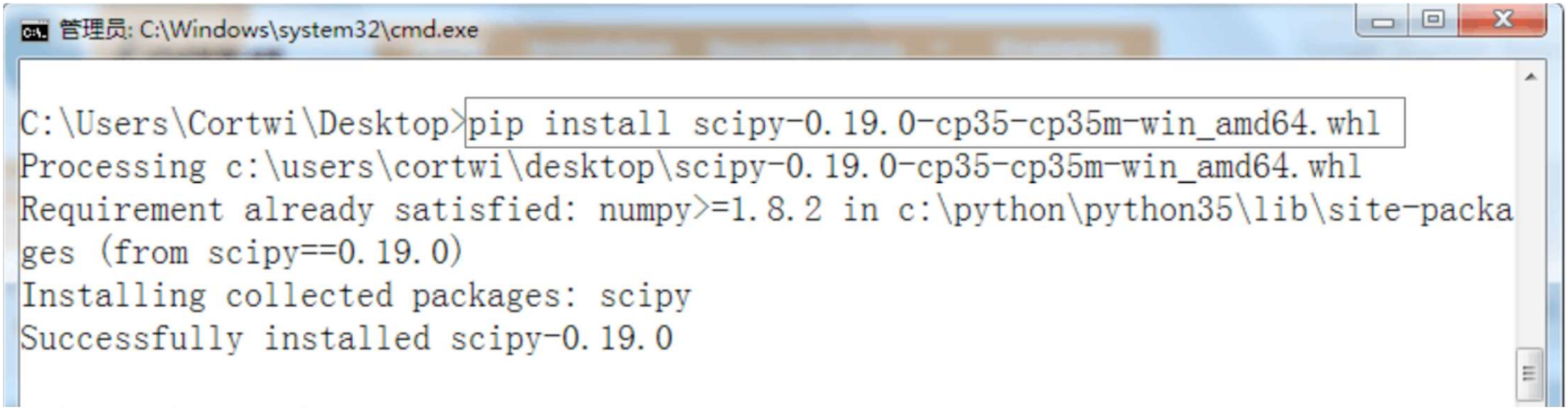
scipy-1.1.0-cp37-none-win_amd64.whl (30.9 MB) SHA256	Wheel	cp37	Jul 2, 2018
scipy-1.1.0.tar.gz (15.6 MB) SHA256	Source	None	May 5, 2018

Installing Scipy

- Find the path to the downloaded file, open the DOS command line window for Windows, and use the following command:

pip install scipy-1.1.0-cp37-none-win_amd64.whl

Installing Scipy



If no installation errors are prompted, the installation is successful.

Install Matplotlib

- Visit Matplotlib‘s download link: https://pypi.org/project/matplotlib/#files
- Download the corresponding file according to the specific version of Python. Also here you need to download **win_amd64.whl* file in the red box.

matplotlib-3.0.0-cp37-cp37m-manylinux1_x86_64.whl (12.8 MB) SHA256	Wheel	cp37	Sep 19, 2018
matplotlib-3.0.0-cp37-cp37m-win32.whl (8.7 MB) SHA256	Wheel	cp37	Sep 19, 2018
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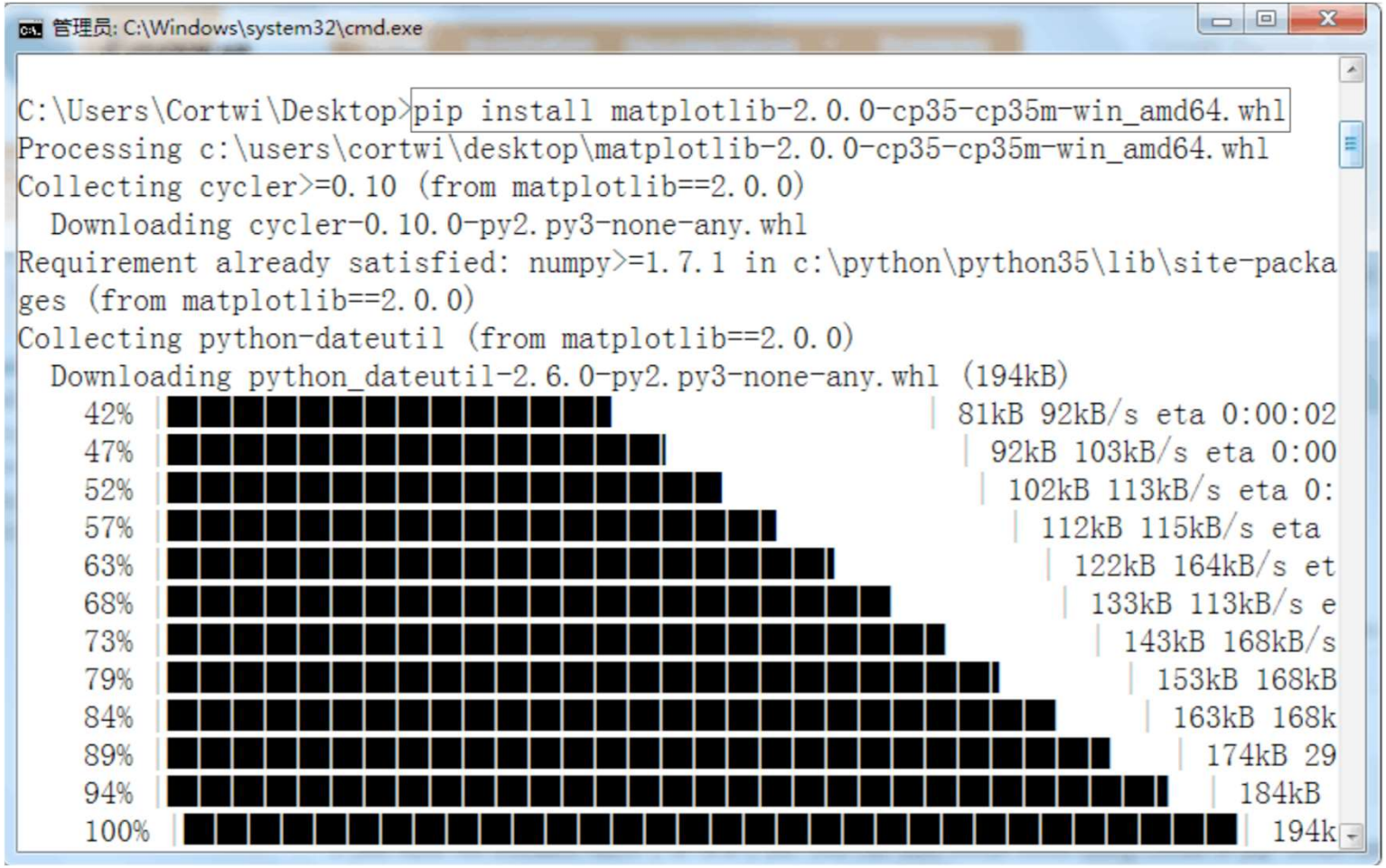
matplotlib-3.0.0.tar.gz (36.3 MB) SHA256	Source	None	Sep 18, 2018

Install Matplotlib

- Find the path to the downloaded file, open the DOS command line window for Windows, and use the following command:

  pip install matplotlib-3.0.0-cp37-cp37m-win_amd64.whl

Installing Matplotlib



Installing Sklearn

- Visit Sklearn‘s download link: https://pypi.org/project/scikit-learn/
- Download the corresponding file according to the specific version of Python. Also here you need to download **win_amd64.whl* file in the red box on the right.

scikit_learn-0.19.2-cp37-cp37m-manylinux1_i686.whl (4.4 MB) SHA256	Wheel	cp37	Jul 15, 2018
scikit_learn-0.19.2-cp37-cp37m-manylinux1_x86_64.whl (4.9 MB) SHA256	Wheel	cp37	Jul 15, 2018
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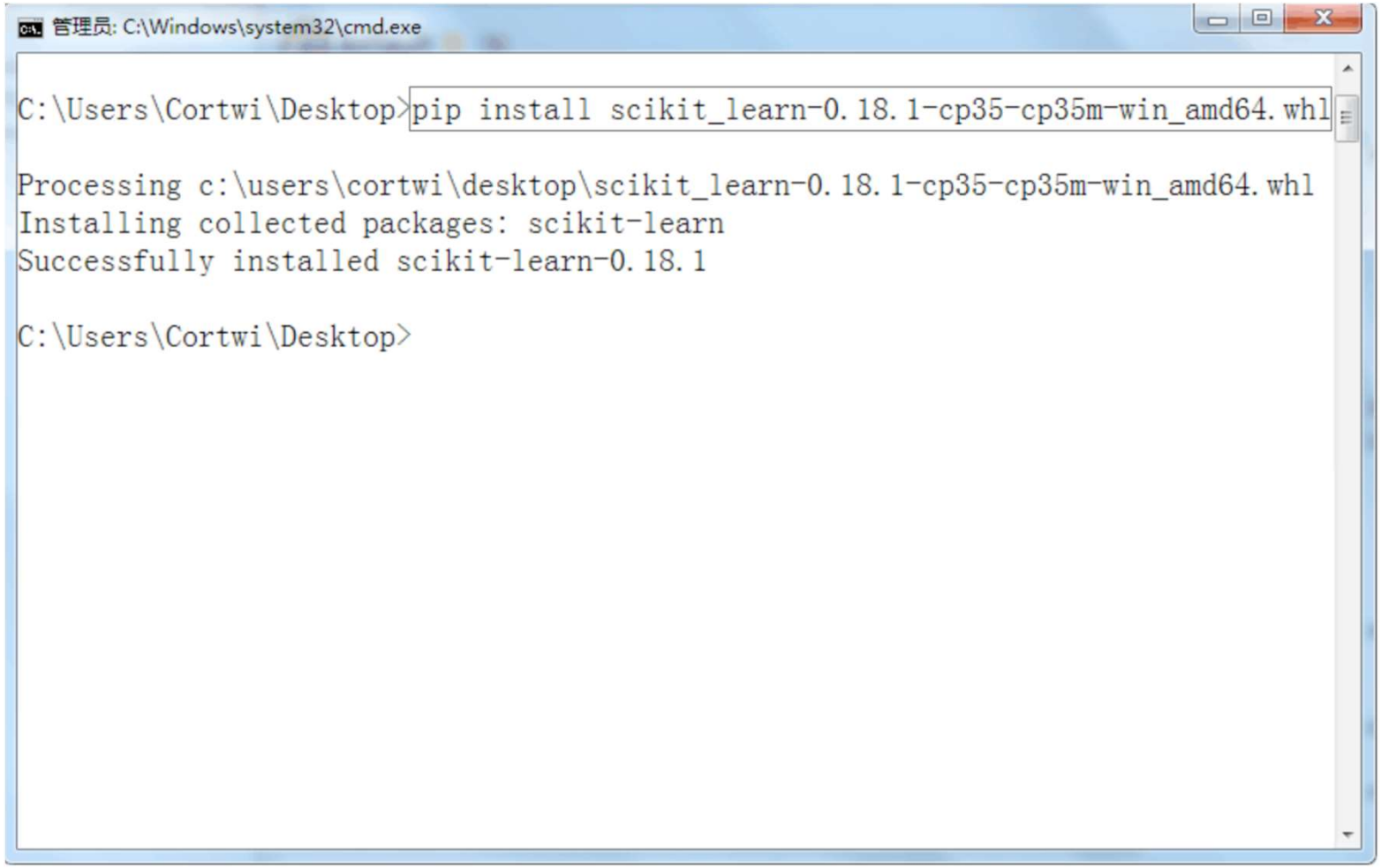
scikit-learn-0.19.2.tar.gz (9.7 MB) SHA256	Source	None	Jul 15, 2018

Installing Sklearn

- Find the path to the downloaded file, open DOS command line window for Windows, and use the following command:

pip install scikit_learn-0.19.2-cp37-cp37m-win_amd64.whl

Installing Sklearn



Test


管理员: C:\Windows\system32\cmd.exe - python
Microsoft Windows [版本 6.1.7601]
版权所有 (c) 2009 Microsoft Corporation。保留所有权利。
C:\Users\Cortwi>python
Python 3.5.3 (v3.5.3:1880cb95a742, Jan 16 2017, 16:02:32) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import numpy
>>> import matplotlib
>>> import sklearn
>>>