



Natural Language Processing

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Natural Language Processing

NLTK

NLTK

- ▶ The NLTK module is a massive tool kit, aimed at helping you with the entire NLP methodology.
- ▶ NLTK will aid you with everything from splitting sentences from paragraphs, splitting up words, recognizing the part of speech of those words, highlighting the main subjects, and then even with helping your machine to understand what the text is all about.
- ▶ In this series, we're going to tackle the field of opinion mining, or sentiment analysis.

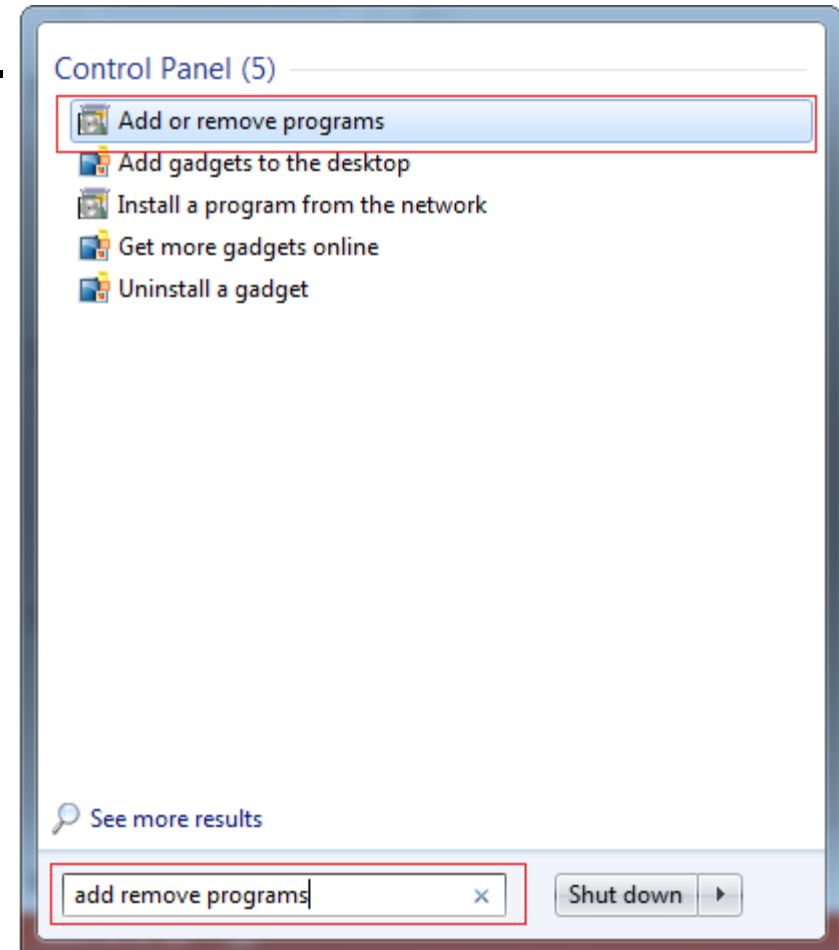


Natural Language Processing

Install NLTK

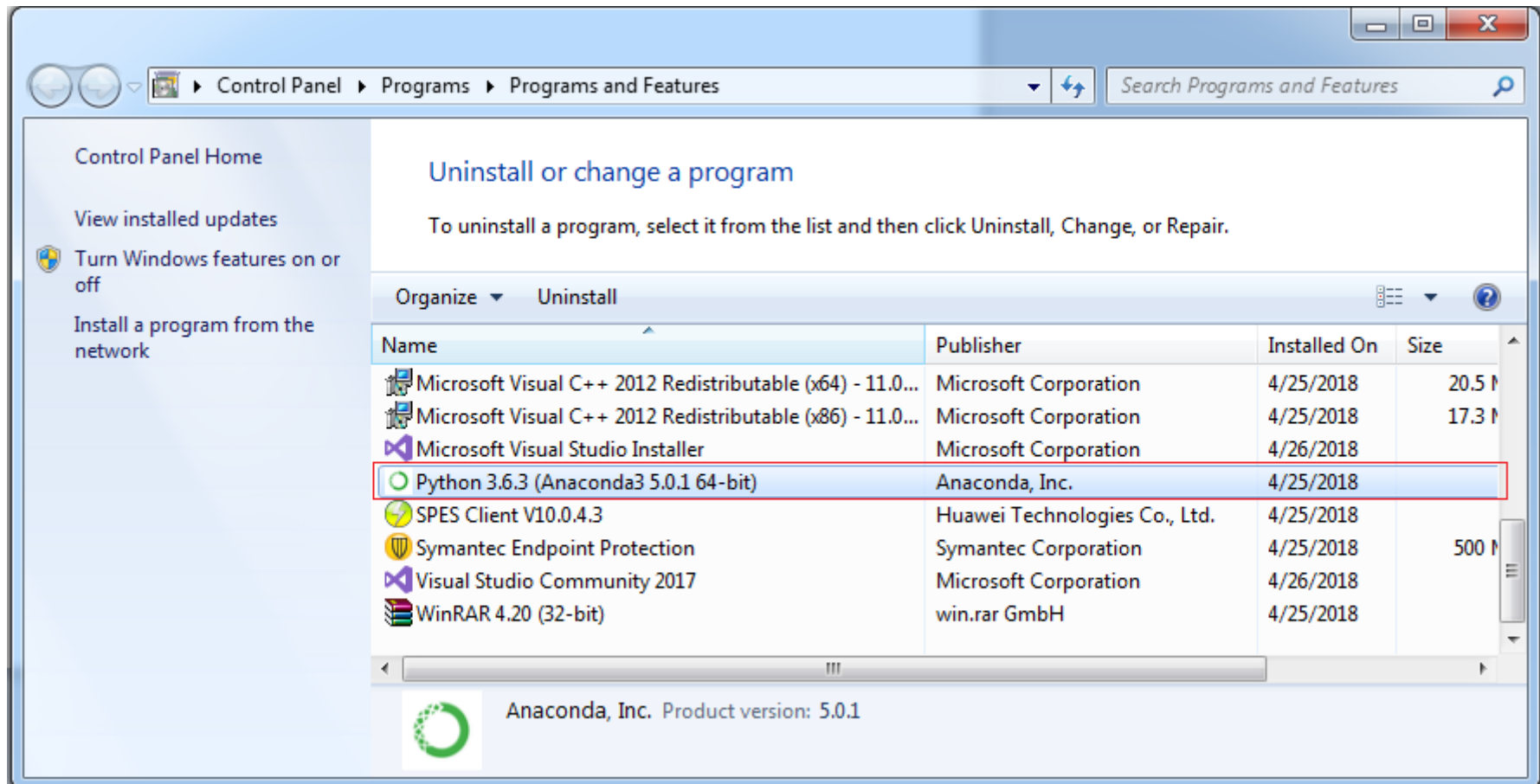
Installation Step-by-Step

- Open add remove programs.



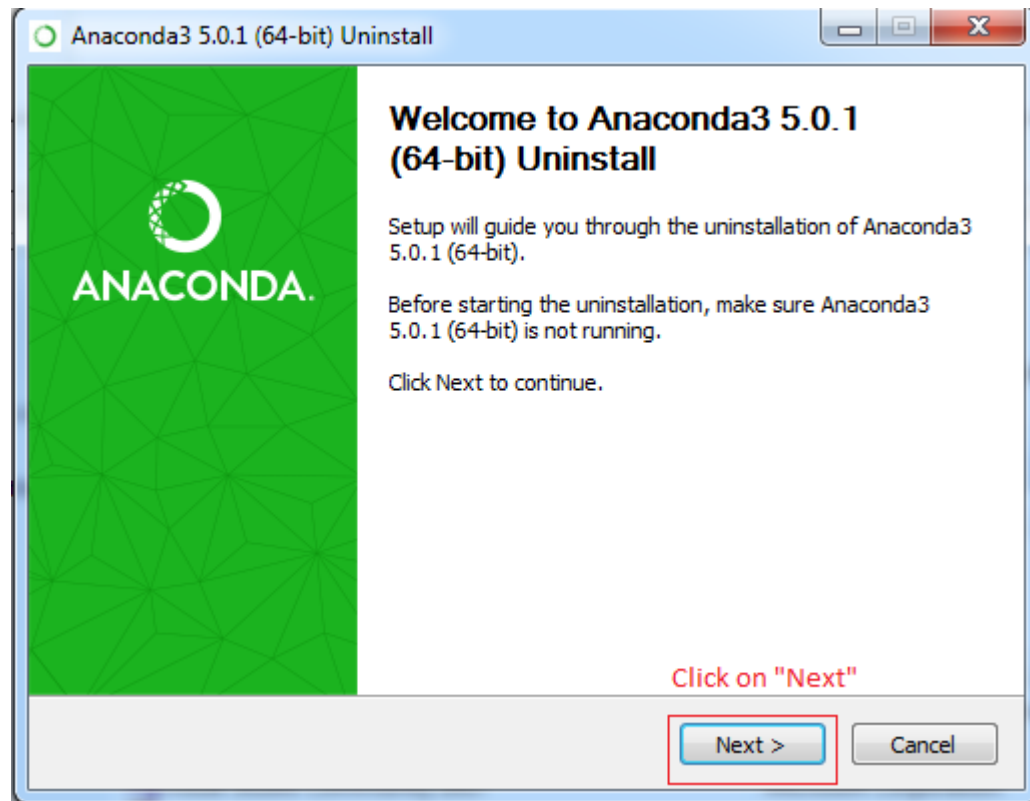
Installation Step-by-Step

- Click on “Python 3.6.3(Anaconda 3 5.0.1 64-bit)”



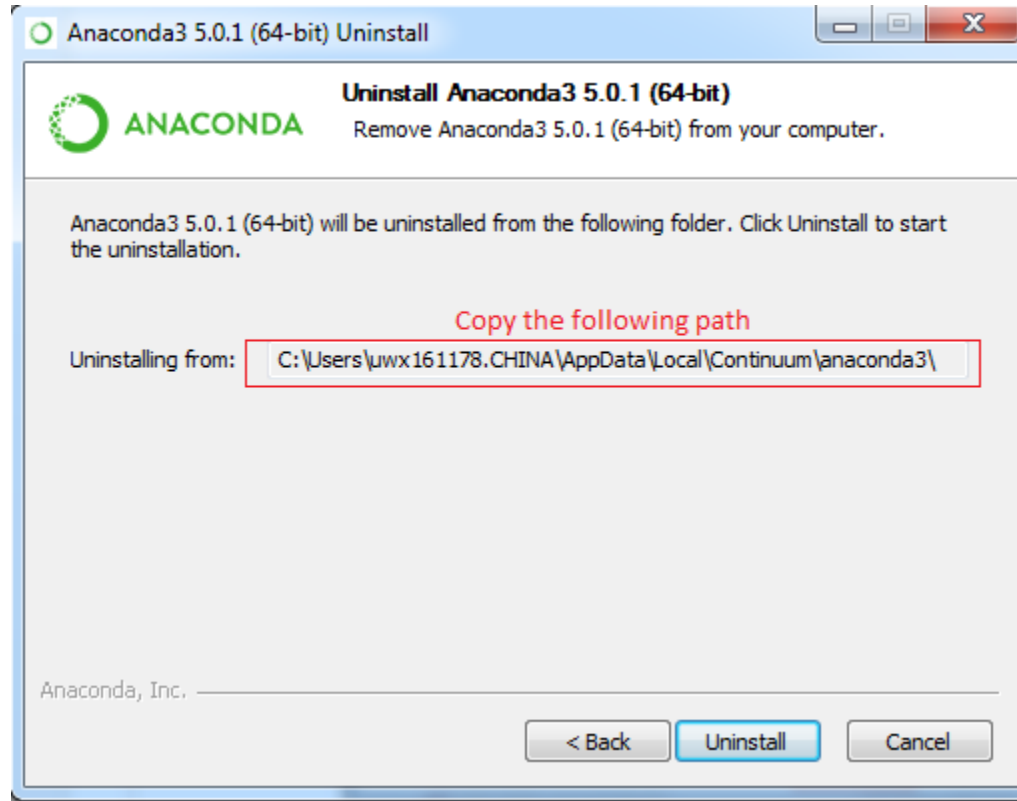
Installation Step-by-Step

- Click on “Next”.



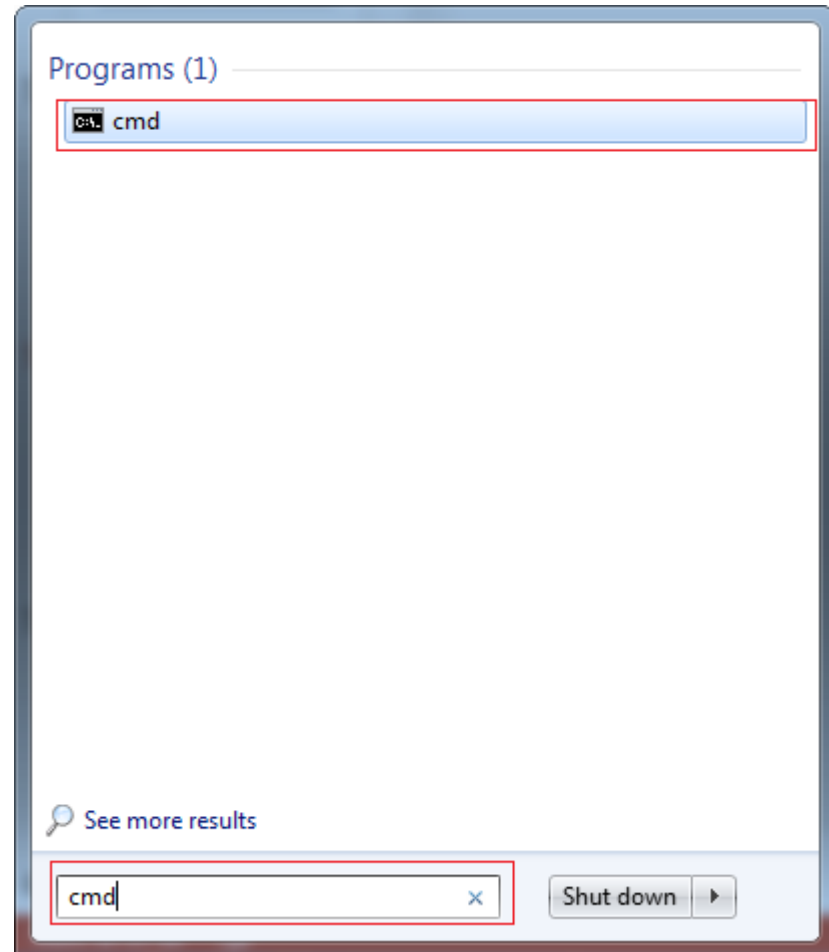
Installation Step-by-Step

- Copy the python installation path;



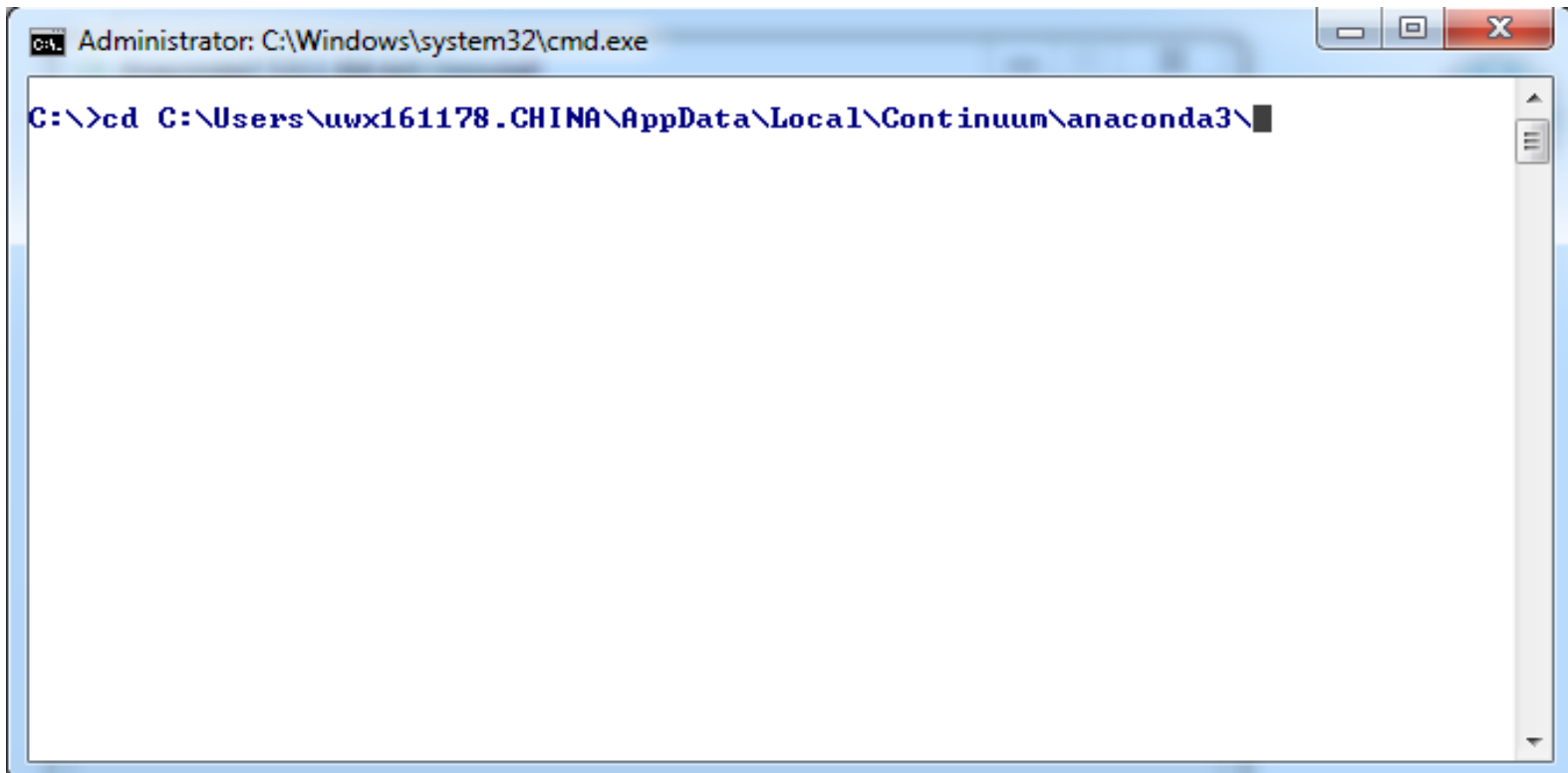
Installation Step-by-Step

- Open cmd.



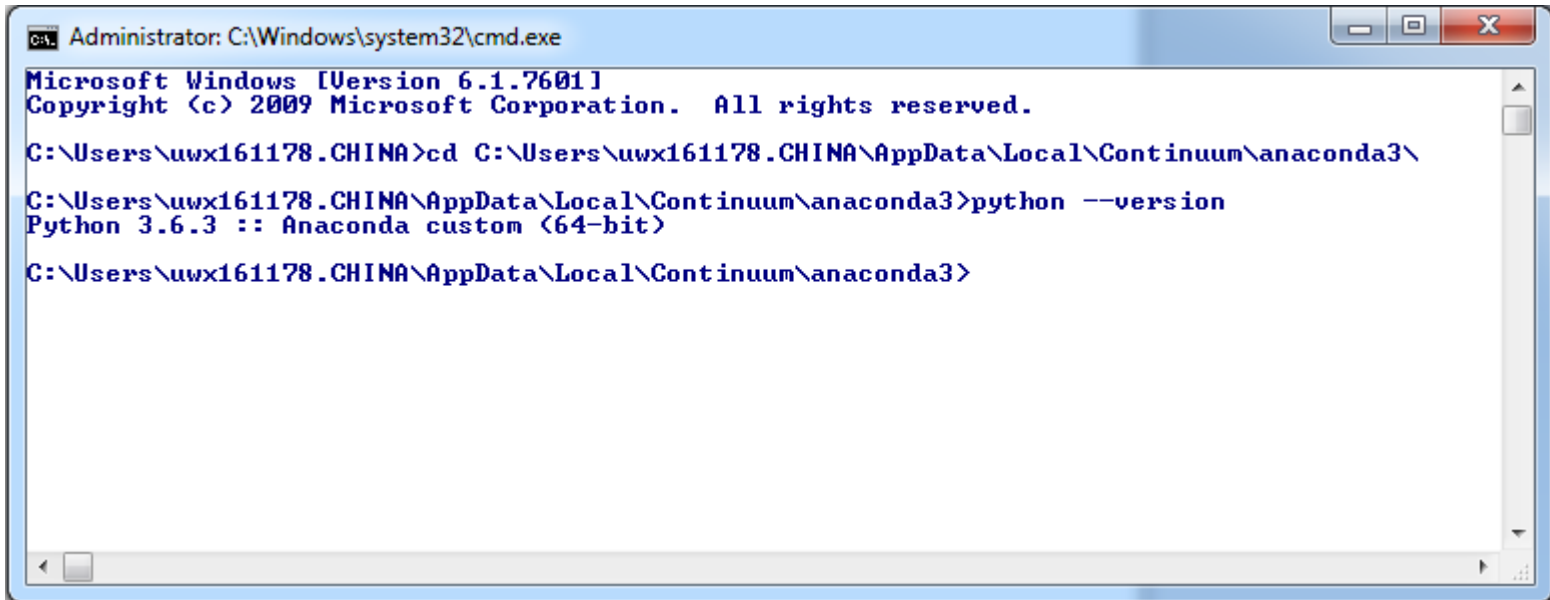
Installation Step-by-Step

- ▶ Run the following command on cmd;
- ▶ C:\Users\uwx161178.CHINA\AppData\Local\Continuum\anaconda3\

A screenshot of a Windows Command Prompt window. The title bar at the top reads 'Administrator: C:\Windows\system32\cmd.exe'. The command prompt shows the command 'C:\>cd C:\Users\uwx161178.CHINA\AppData\Local\Continuum\anaconda3\' entered, with a black cursor at the end of the line. The window has a standard Windows interface with minimize, maximize, and close buttons in the top right corner.

Installation Step-by-Step

- ▶ `python --version`

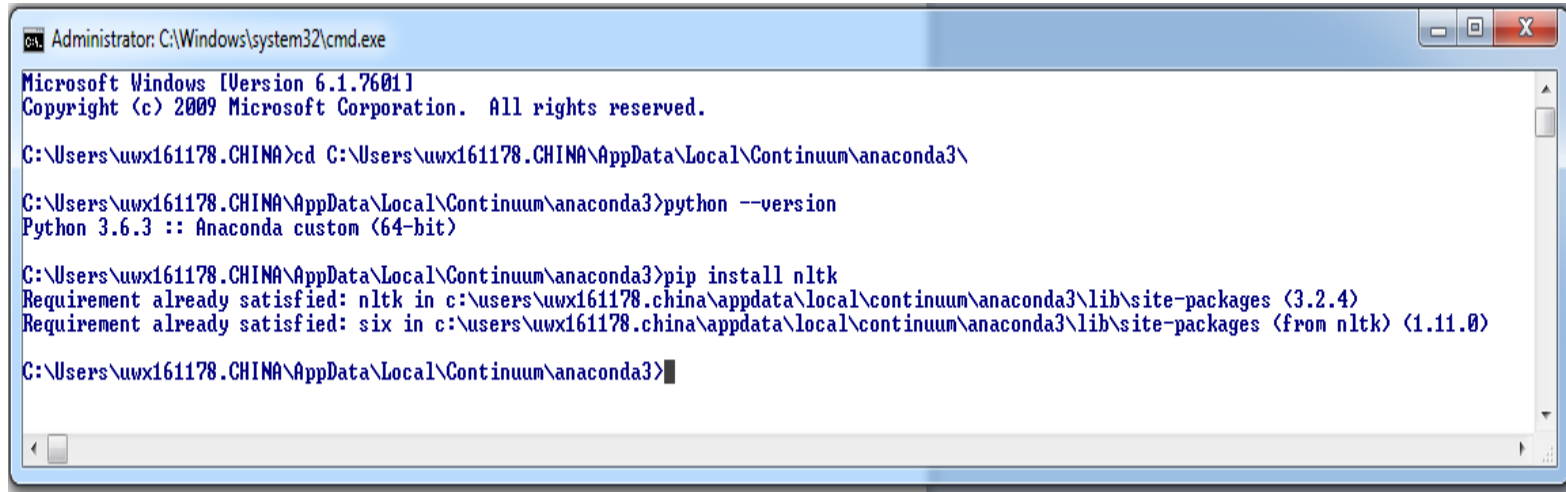
A screenshot of a Windows command prompt window titled 'Administrator: C:\Windows\system32\cmd.exe'. The window shows the following text:

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\uwx161178.CHINA>cd C:\Users\uwx161178.CHINA\AppData\Local\Continuum\anaconda3\
C:\Users\uwx161178.CHINA\AppData\Local\Continuum\anaconda3>python --version
Python 3.6.3 :: Anaconda custom (64-bit)
C:\Users\uwx161178.CHINA\AppData\Local\Continuum\anaconda3>
```

Installation Step-by-Step

► pip install nltk



```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\uwx161178.CHINA>cd C:\Users\uwx161178.CHINA\AppData\Local\Continuum\anaconda3\

C:\Users\uwx161178.CHINA\AppData\Local\Continuum\anaconda3>python --version
Python 3.6.3 :: Anaconda custom (64-bit)

C:\Users\uwx161178.CHINA\AppData\Local\Continuum\anaconda3>pip install nltk
Requirement already satisfied: nltk in c:\users\uwx161178.china\appdata\local\continuum\anaconda3\lib\site-packages (3.2.4)
Requirement already satisfied: six in c:\users\uwx161178.china\appdata\local\continuum\anaconda3\lib\site-packages (from nltk) (1.11.0)

C:\Users\uwx161178.CHINA\AppData\Local\Continuum\anaconda3>
```

Installation Step-by-Step

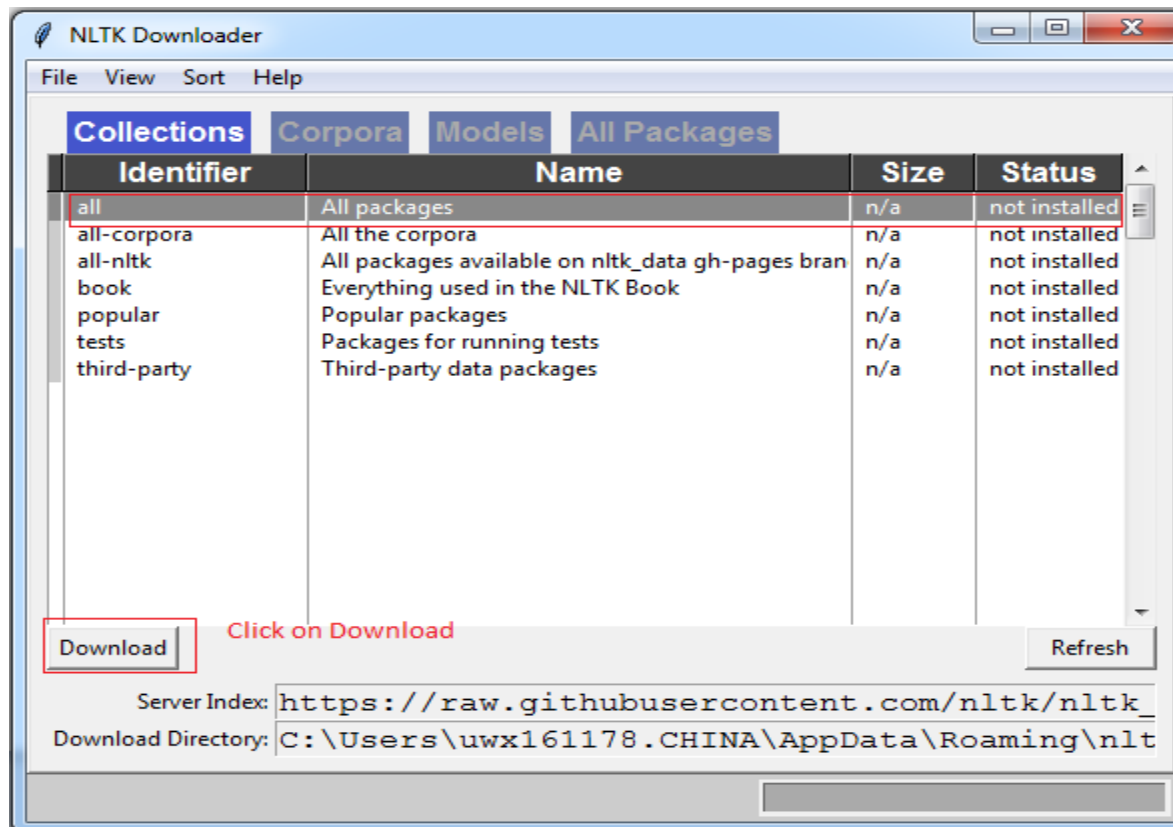
- ▶ Run the following code on Spyder, if no error its mean installation is ok.

```
import nltk
```

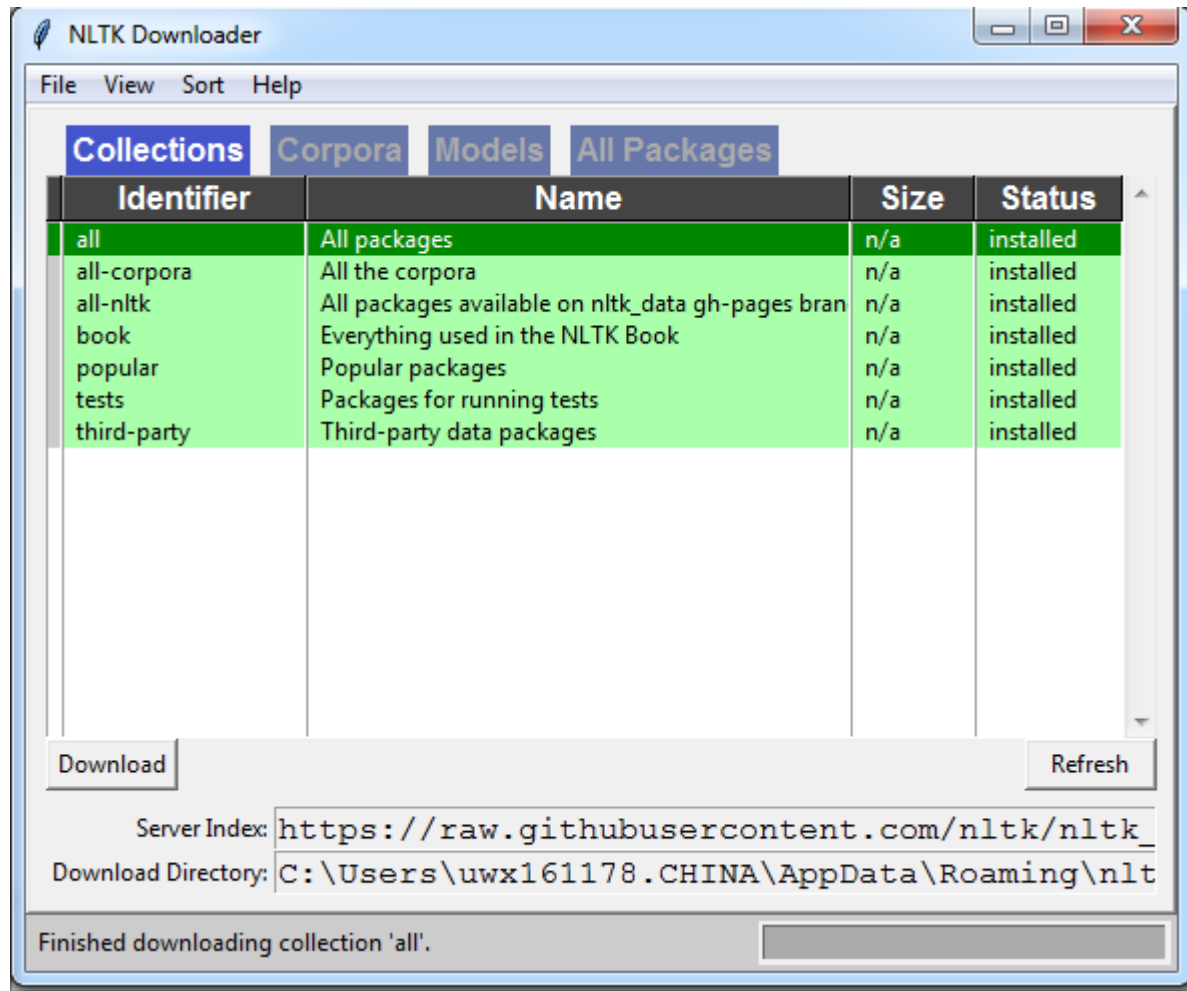
Installation Step-by-Step

- Download nltk package (using Spyder command)

`nltk.download()`



Installation Step-by-Step



Installation Step-by-Step

- ▶ Run the following code on Spyder, if no error its mean installation is ok.

```
import nltk
```

```
from nltk.tokenize import word_tokenize
```

```
word_tokenize("Hello world")
```

```
In [7]: from nltk.tokenize import word_tokenize
...: word_tokenize("Hello world")
Out[7]: ['Hello', 'world']
```