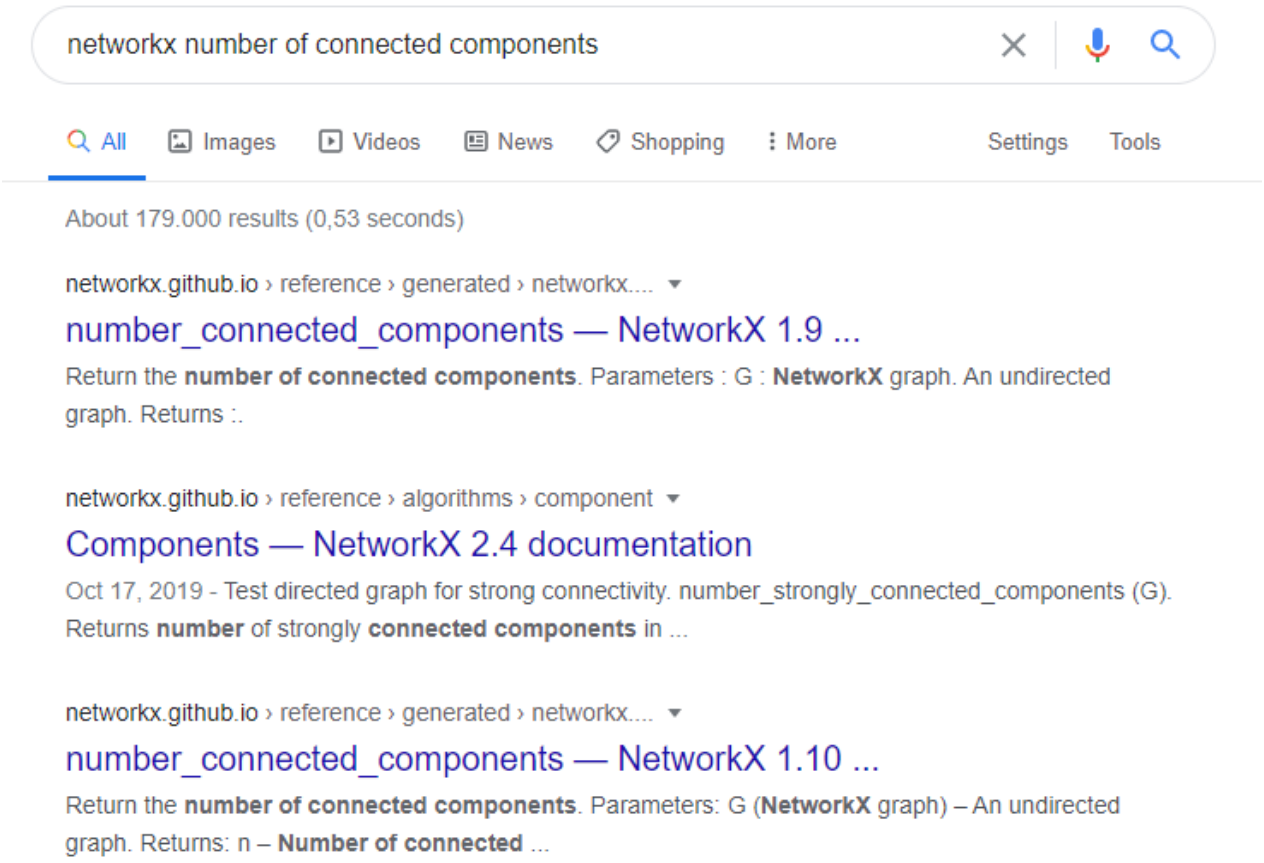
Installing NetworkX for Network Analysis

This brief guide describes how to install or upgrade the NetworkX library, which is a *Python package for the creation, manipulation, and study of the structure, dynamics, and functions of complex networks*.

Moreover, NetworkX is the official library for exercises in the Network Analysis course.

One of the joys of NetworkX is that the function and variable naming scheme is incredibly well-suited for search results. For instance, if I want to find the funtion to compute the number of connected components in a Graph:



Be aware, as shown above, that search results often reference the documentation for different versions of NetworkX.

This guide assumes that you have access to a Python 3.6+ environment, preferrably through the Anaconda (https://anaconda.org/) distribution.

If you installed Python through Anaconda

NetworkX is currently installed automatically with Anaconda. You can check if the library is installed in your environment using the following command:

In [ ]:
```
conda list network
```

If NetworkX is ***not installed*** in your environment, use the following command:

In [ ]:
```
conda install -y networkx
```

If NetworkX is ***already installed***, upgrade to the latest available version for your environment:

In [ ]:
```
conda update networkx
```

If you did not install Python through Anaconda

Follow the guide available on the NetworkX documentation to install or upgrade to the latest version of NetworkX using Pip: https://networkx.github.io/documentation/stable/install.html (https://networkx.github.io/documentation/stable/install.html)

Install the current release of networkx with pip:

```
pip install networkx
```

To upgrade to a newer release use the --upgrade flag:

```
pip install --upgrade networkx
```

Test your installation

In a Python shell, type the following to ensure that NetworkX is successfully installed:

In [ ]:
```
import networkx as nx
nx.test()
```