PyDoc Auto-Doc Generation

In your code:

- Document module

- Document functions (purpose, parameters, return value)

Generate documentation:

- Run 'pydoc'

- Point it at source code

- Output is well-organized and structured documentation of your module

Pydoc is a documentation tool for Python and is included in Python versions 2.1 and higher. Pydoc uses multiline comments in modules and functions. The pydoc output is generated by the following commands:

```
$ pydoc command_ssh.py
```

Or

```
$ pydoc command_ssh
```

> **Note**
>
> Some versions of Python and pydoc require the file suffix (.py), and some do not. The best advice is to try one method, and if it fails, try the other.

Running pydoc against well-documented code will result in documentation such as shown below:

```
Help on module command_ssh:

NAME
    command_ssh

FILE
    /home/PRNE/Module6/command_ssh.py

DESCRIPTION
    Example of a script that executes a CLI command on a remote
    device over established SSH connection.

    Administrator login options and CLI commands are device specific,
    thus this script needs to be adapted to a concrete device specifics.
    Current script assumes interaction with Cisco IOS device.

    NOTES: Requires installation of the 'paramiko' Python package
             pip install paramiko
           The 'paramiko' package is documented at:
             http://docs.paramiko.org
           Complete set of SSH client operations is available at:
             http://docs.paramiko.org/en/1.15/api/client.html

FUNCTIONS
    check_config_mode(device_info, rsh)
        Check if CLI on the device is in configuration mode.
        :param dict device_info: dictionary containing information
            about target device.
```

```
        :param paramiko.channel.Channel rsh: channel connected to a remote shell.
        :return: True if CLI is in configuration mode, False otherwise
        Returns a boolean


connect_ssh(device_info)
        Establish SSH connection to a remote device.
        :param dict device_info: dictionary containing information
            about target device.
        :return: an instance of paramiko.SSHClient class connected
            to the device on success, None on failure.


disable_paging(device_info, rsh)
        Disable CLI paging on a remote device.
        :param dict device_info: dictionary containing information
            about target device.
        :param paramiko.channel.Channel rsh: channel connected to a remote shell.
```