**Slightly more intricate than the simplest  
  
16. \*\*grep\*\*:** Search for patterns in files. It's used to search for specific patterns within files.

Example:   
grep “I am” sample.txt  
  
**case insensitive** **version is -i**  
  
grep -i "I am" sample.txt  
  
**search multiple documents for patterns**  
  
grep "pattern" file1.txt file2.txt  
  
**search files in an entire folder for a pattern** **by adding -r**  
  
grep -r "pattern" folder/  
  
**Find the count of a particular pattern in a document**  
  
grep -c "pattern" sample.txt  
  
**If you want to add the line numbers, you add a -n**  
  
grep -n "pattern" sample.txt  
  
**To find the lines which are inverted – meaning do not have the pattern**  
  
grep -v "pattern" filename sample.txt  
  
**This code below searches for lines that start with the pattern**  
  
grep "^pattern" filename

**17. \*\*chmod\*\*:** Change file permissions. This command is used to change the permissions of a file or directory.

**18. \*\*chown\*\*:** Change file owner and group. This command is used to change the owner and group of a file or directory.

**19. \*\*ssh\*\*:** Secure Shell. This command is used to establish a secure connection to another computer.

**20. \*\*scp\*\*:** Secure copy. It's used to securely copy files between computers.

**### Copying a File from Local to Remote Host:**

To copy a file from your local machine to a remote host, use the following syntax:

**scp /path/to/local/file username@remote\_host:/path/to/destination**

Replace `/path/to/local/file` with the path to the file you want to copy, `username` with your username on the remote host, `remote\_host` with the hostname or IP address of the remote server, and `/path/to/destination` with the destination directory on the remote server.

**Example:**

scp ~/Documents/file.txt user@example.com:/home/user/documents/

**### Copying a File from Remote to Local Host:**

To copy a file from a remote host to your local machine, use the following syntax:

**scp username@remote\_host:/path/to/remote/file /path/to/local/destination**

Replace `username` with your username on the remote host, `remote\_host` with the hostname or IP address of the remote server, `/path/to/remote/file` with the path to the file on the remote server, and `/path/to/local/destination` with the destination directory on your local machine.

**Example:**

scp user@example.com:/home/user/file.txt ~/Downloads/

**### Copying a Directory Recursively:**

To copy an entire directory and its contents recursively, use the `-r` option:

**scp -r /path/to/local/directory username@remote\_host:/path/to/destination**

Or from remote to local:

**scp -r username@remote\_host:/path/to/remote/directory /path/to/local/destination**

**### Specifying Port Number:**

If SSH is running on a non-standard port on the remote host, you can specify the port number with the `-P` option:

**scp -P port\_number /path/to/local/file username@remote\_host:/path/to/destination**

**Or:**

**scp -P port\_number username@remote\_host:/path/to/remote/file /path/to/local/destination**

**### Using SSH Key Authentication:**

If you've set up SSH key authentication, you won't need to enter a password. `scp` will automatically use your SSH key. If you haven't set up SSH key authentication, `scp` will prompt you for the password.

These are just some basic examples of how you can use `scp` to securely transfer files between hosts. There are many more options and variations available, which you can explore by checking the `scp` manual page (`man scp`).

**21. \*\*wget\*\*:** Download files from the internet. This command is used to download files from a specified URL.  
  
**Download a file**  
wget <https://example.com/file.txt>  
  
**Download a file and change its name – what it saves as**wget -O output\_file.txt <https://example.com/file.txt>  
  
**Continue an interrupted download with -c**wget -c <https://example.com/file.txt>  
  
**Download in background** **with -b**  
  
wget -b<https://example.com/file.txt>

**Limit download speed**wget --limit-rate=100k <URL> **Downloading multiple files**  
wget <URL1> <URL2> <URL3> ...

**Download all files from a url**wget -r <URL>