# stdout

- Screen is the standard output
- Use “>” to redirect standard output

| Command | Comment |
| --- | --- |
| $ echo mytext > file1 | Write output of echo to file (overwrites file) |
| $ echo newtext >> file1 | Append output of echo to file (do not overwrite file) |

# stdin

- "<" is the input redirection operator
- Use a File or output from other processes and the terminal as the stdin instead of keyboard

| Command | Comment |
| --- | --- |
| $ cat < file1 > file2 | redirect file1 as std input to cat command and output of cat is redirected to file2 |

# stderr

- By default, standard error output is sent to screen

| Command | Comment |
| --- | --- |
| $ ls /dir1/fake 2> file3 | redirect error message to the file by using file descriptor |
| $ ls /dir1/fake &> file3 | redirect both stdout and stderr to a file named file3 |

# Chain Linux Commands

- To redirect stdout of a command to stdin of another command, use the **pipe** operator (|)

| Command | Comment |
| --- | --- |
| $ ls -a \| less | Redirect std output of ls command to std input of less command |

# Chain Linux Commands

- To redirect the standard output to both file and screen, use **tee** command

| Command | Comment |
| --- | --- |
| $ ls \| tee file5 | Show output of ls command on screen and also write the same output to file named file5 |

# grep

- grep command can be used to search for a keyword in a file or check if a file exists in a directory

| Command | Comment |
| --- | --- |
| $ grep hello file1 | check if file named file1 contains the keyword "hello" |
| $ grep -i hello file1 | Do case insensitive search for keyword “hello” on file |

# wc and nl

| Command | Comment |
| --- | --- |
| $ wc file1 | view count of words on a file named file1 |
| $ nl file1 | View count of lines on a file |

# sort

- sort command is used to sort the lines of an output

| Command | Comment |
| --- | --- |
| $ ls \| sort | Sort the file names on ls command output |

# uniq

- To view only unique content of a file, use uniq command

| Command | Comment |
| --- | --- |
| $ uniq file2 | Show unique content of file named file2. Remove duplicates on output |

# env

| Command | Comment |
| --- | --- |
| $ env | Print environment variables on your system |

# gzip and tar

| Command | Comment |
| --- | --- |
| $ gzip file1 | compress a file named file1 |
| $ gunzip file1.gz | Uncompress file named file1.gz |
| $ tar cvf myarchive.tar file1 file2 | Create an archive named "myarchive" from files named file1 and file2 |
| $ tar xvf myarchive.tar | Extract content of the archive |

# head and tail

| Command | Comment |
| --- | --- |
| $ head file1 | view first 10 lines of the file named file1 |
| $ tail file2 | View last 10 lines of file named file2 |