

Pipes

- A pipe is used by the shell to connect the stdout of one command directly to the stdin of another command.
- The symbol for a pipe is the vertical bar (|). The command syntax is:

```
command1 [arguments] | command2 [arguments]
```

- Pipes accomplish with one command what otherwise would take intermediate files and multiple commands. For example, operation 1 and operation 2 are equivalent:

Operation 1

```
who > temp  
sort temp
```

Operation 2

```
who | sort
```

- Pipes do not affect the contents of the input files.
- Two very common uses of a pipe are with the "more" and "grep" utilities. Some examples:

```
ls -al | more  
who | more  
ps ug | grep myuserid  
who | grep kelly
```