# Day 2: More Bash

## Piping output

The "|" key (shift \) is the *pipe*. It redirects the output of one command Into another command.

Example: general format for piping commands

command\_1 | command\_2

```
[bbm617@quser12 ~]$ ls

12  17  21  24  3  4  42  43  8  hpc_support intel old simulations
[bbm617@quser12 ~]$ ls | sort -n
hpc_support
intel
old
simulations

3

4

8

12

17

21

24

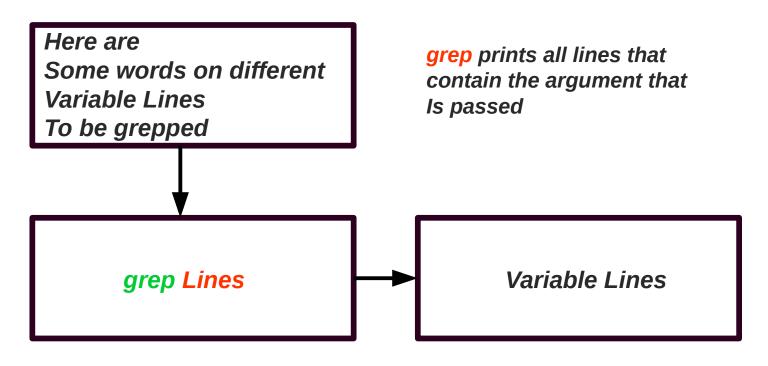
42

43

[bbm617@quser12 ~]$ |
```

## Advanced Commands - grep

## grep – a filter



# Advanced Commands - grep

```
[bbm617@quser12 ~]$ ls

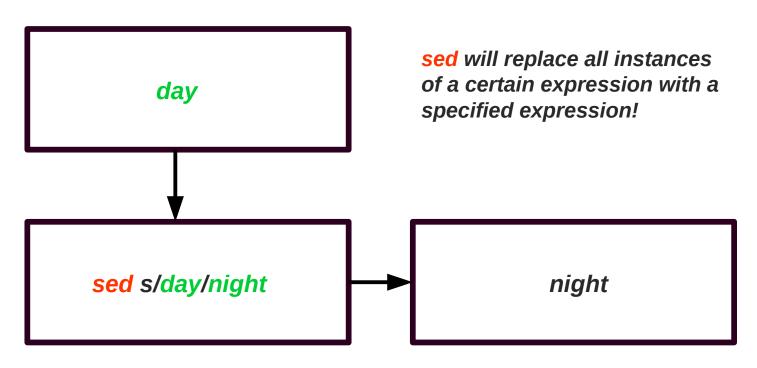
12 17 21 24 3 4 42 43 8 hpc_solutions hpc_support intel old simulations
[bbm617@quser12 ~]$ ls | grep hpc
hpc_solutions
hpc_support
[bbm617@quser12 ~]$ ■
```

#### You may also call grep directly with a file as an argument

```
[bbm617@quser12 simulations]$ ls
data file2.txt runs scripts summerstudents
[bbm617@quser12 simulations]$ cat file2.txt
here
is
some
random
data
3.14149
[bbm617@quser12 simulations]$ grep 14 file2.txt
3.14149
[bbm617@quser12 simulations]$
```

# Advanced Commands - sed

## sed – is more or less a replacement tool



## Advanced Commands - sed

## sed examples

```
[bbm617@quser12 simulations]$ echo day | sed s/day/night/g
night
[bbm617@quser12 simulations]$ |
```

## You may also call sed within vim