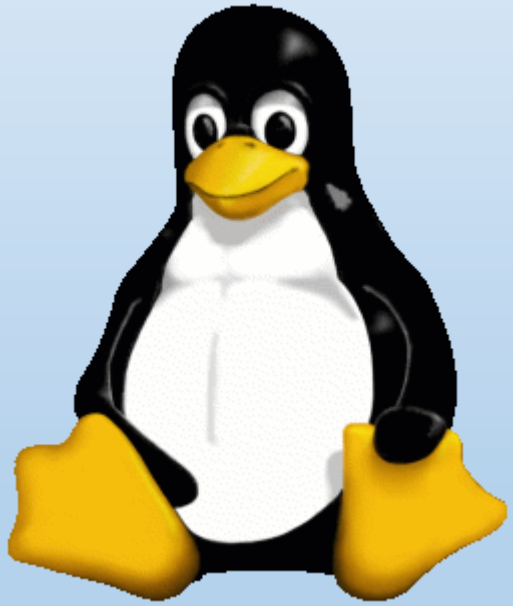
Linux Filesystem



What is this?

A series of mini-games to play with the file system navigation

File system trees

Path maniac:

Follow the commands and draw the results

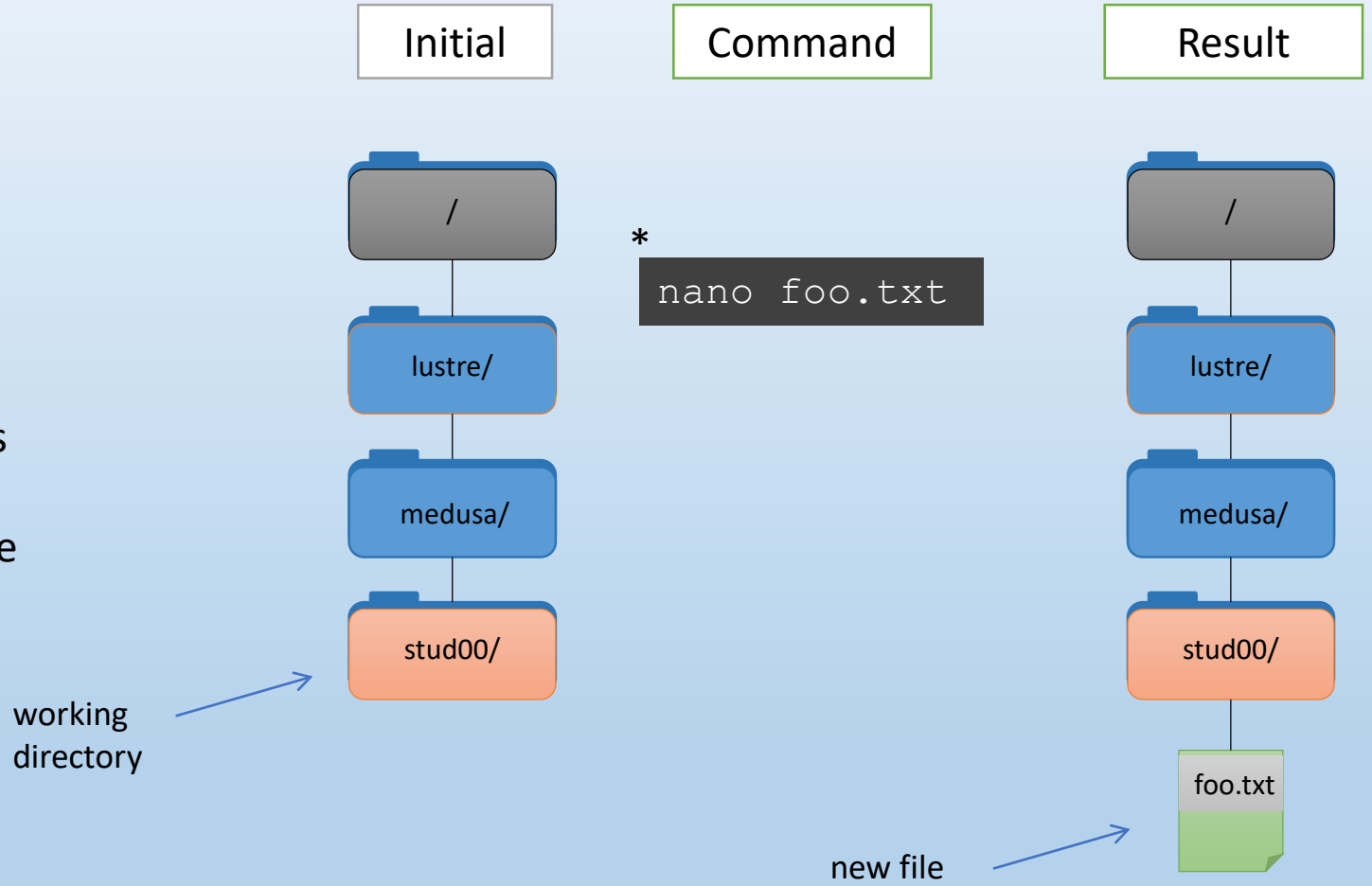
How does it work?

You will be given:

1. A path tree
2. A series of commands

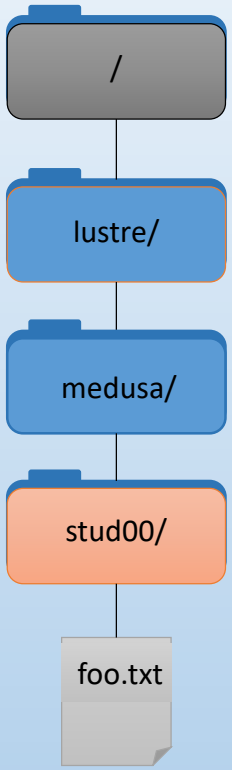
Your mission:

- Draw the resulting tree



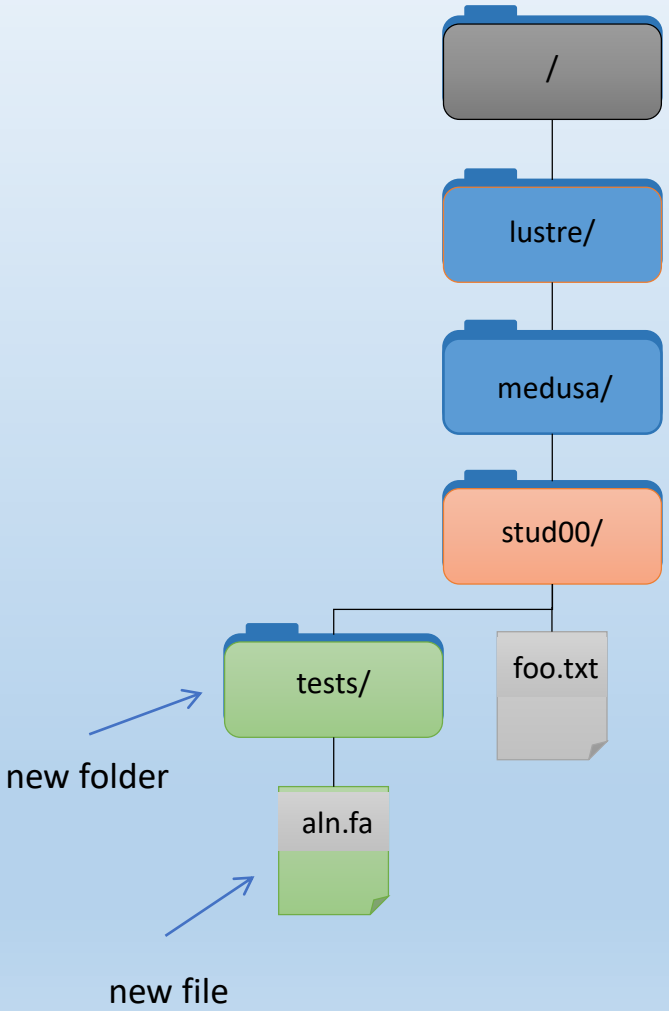
* Remember to type and save some text into nano to create the file

Path maniac:
Follow the commands and draw the results



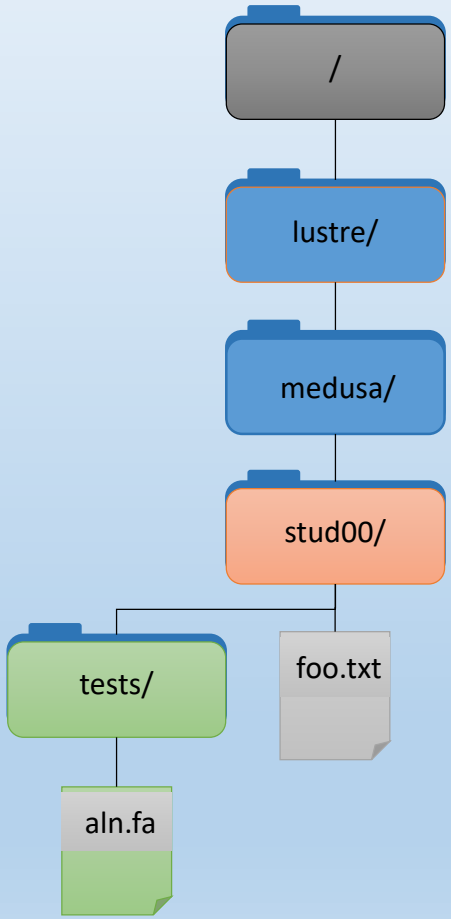

```
mkdir tests
nano tests/aln.fa
```

Path maniac:
Follow the commands and draw the results

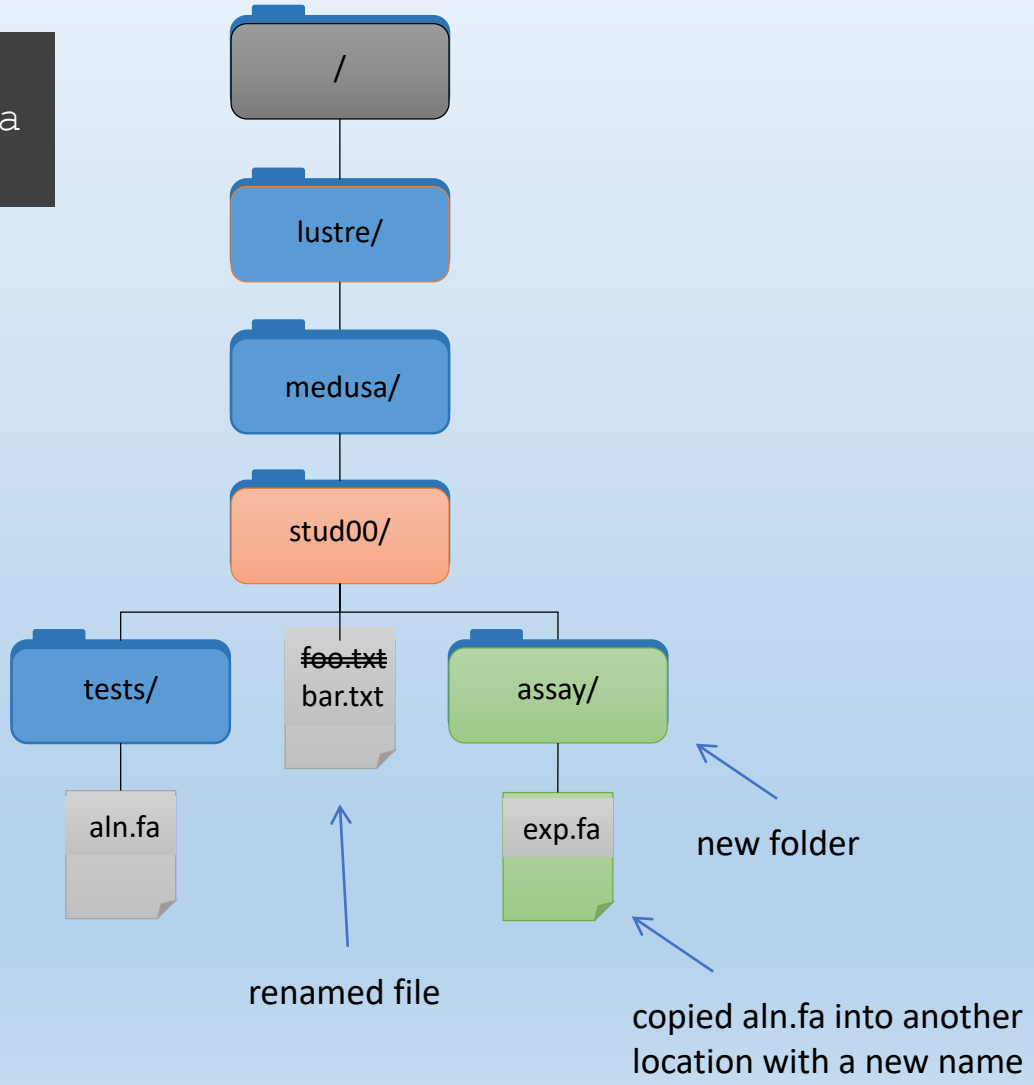



```
mkdir assay
cp tests/aln.fa assay/exp.fa
mv foo.txt bar.txt
```

Path maniac:
Follow the commands and draw the results




```
mkdir assay
cp tests/aln.fa assay/exp.fa
mv foo.txt bar.txt
```



Absolute path names

Absolute advantage:

Write the Shell commands that generate the final tree from the initial tree using only absolute paths

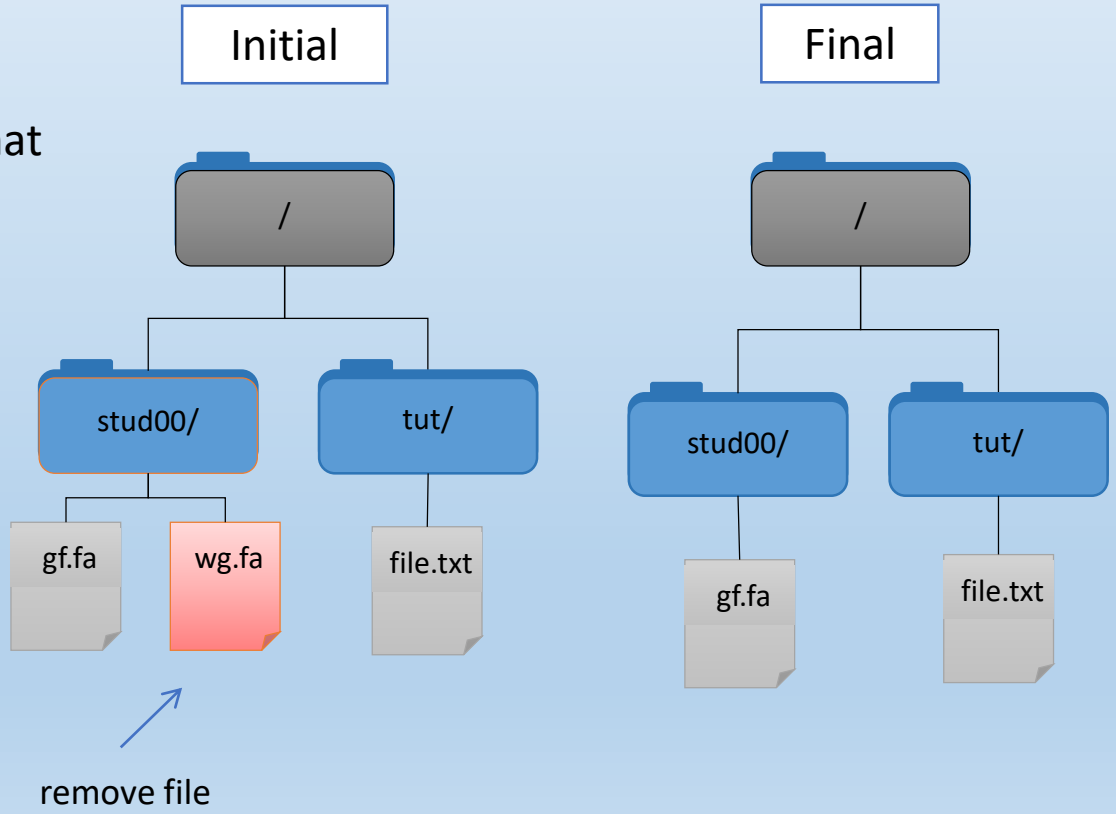
How does it work?

You will be given:

1. An initial path tree
2. A final path tree

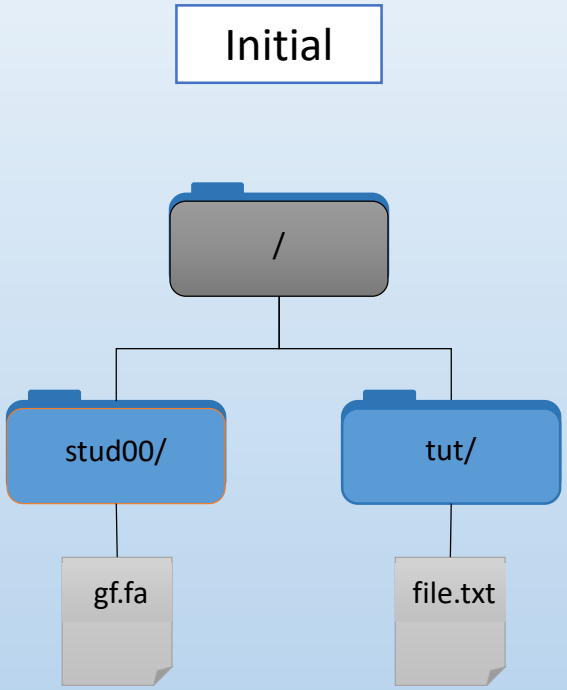
Your mission:

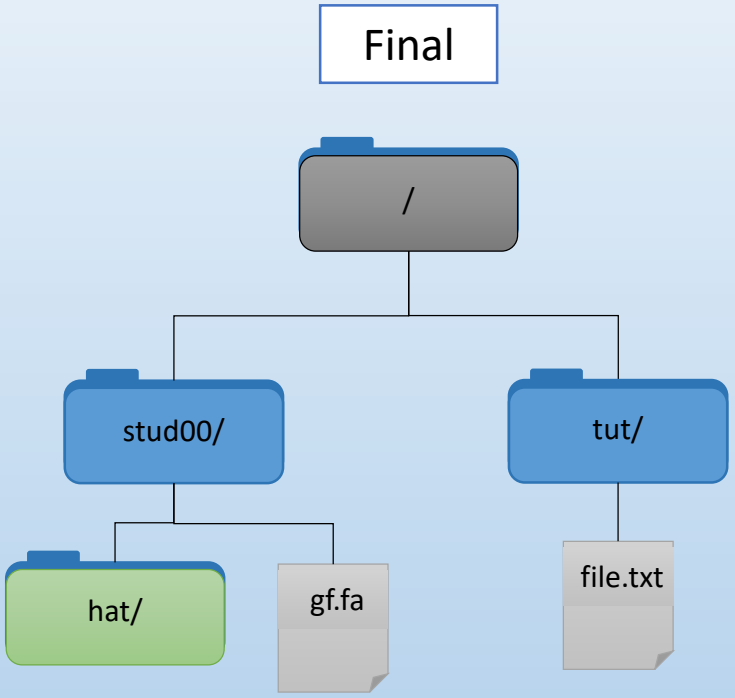
- Write the commands that make the change using absolute paths



Absolute advantage challenge:

Write the Shell commands that generate the final tree from the initial tree using only absolute paths

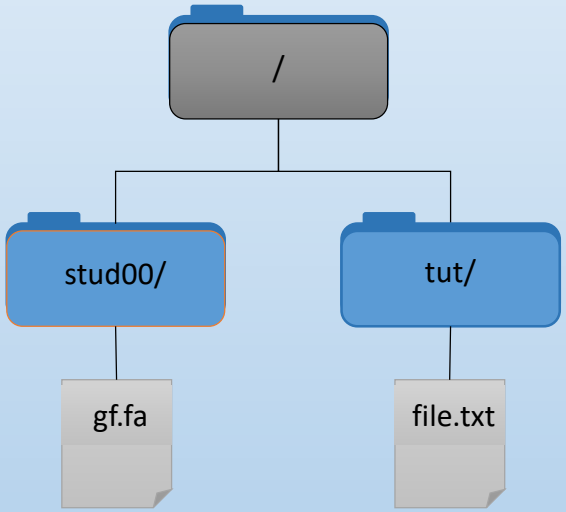




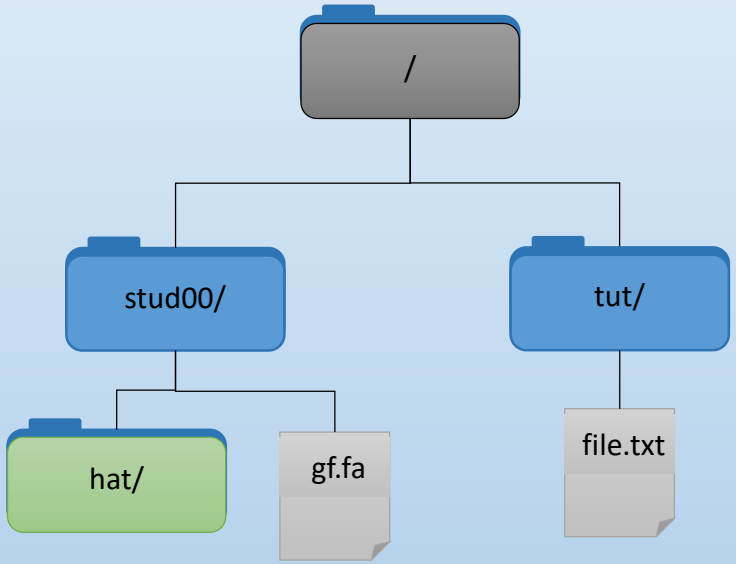
Absolute advantage challenge:

Write the Shell commands that generate the final tree from the initial tree using only absolute paths

Initial



Final



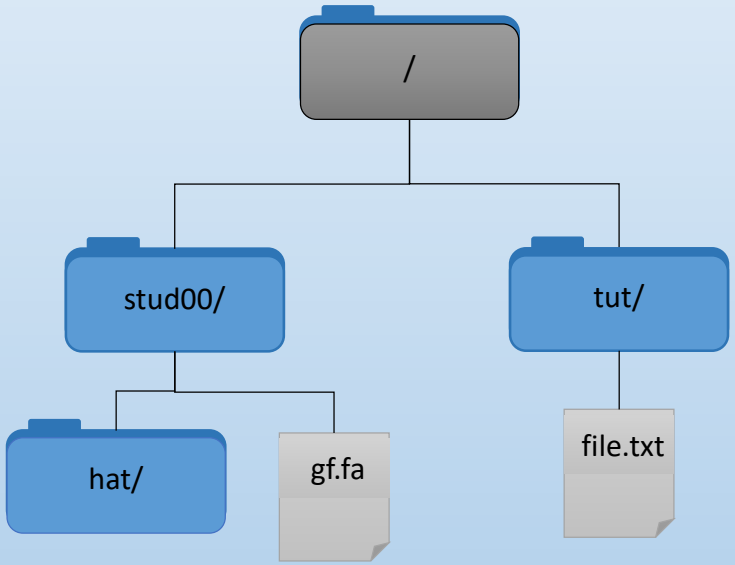
Command

```
mkdir /stud00/hat
```

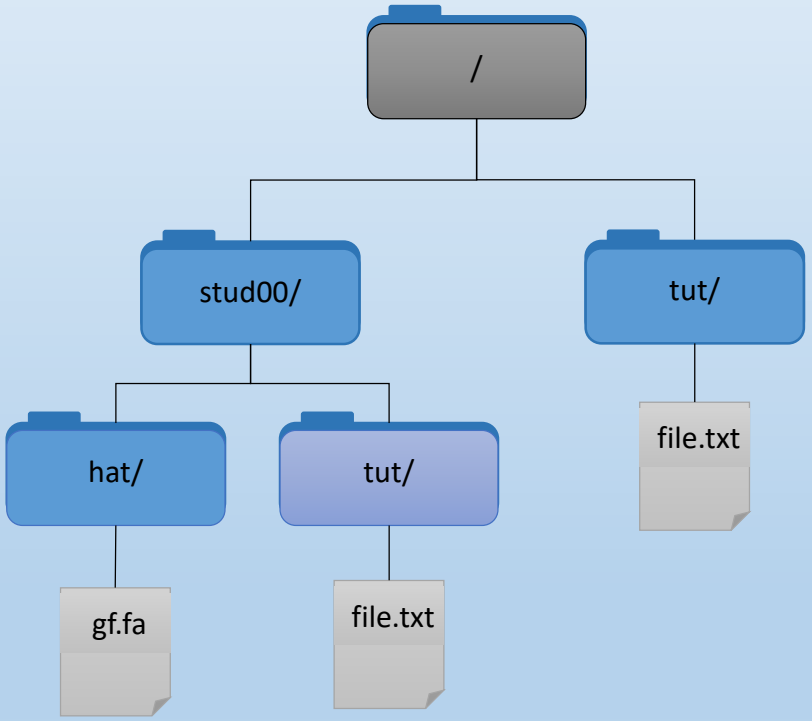
Absolute advantage challenge:

Write the Shell commands that generate the final tree from the initial tree using only absolute paths

Initial



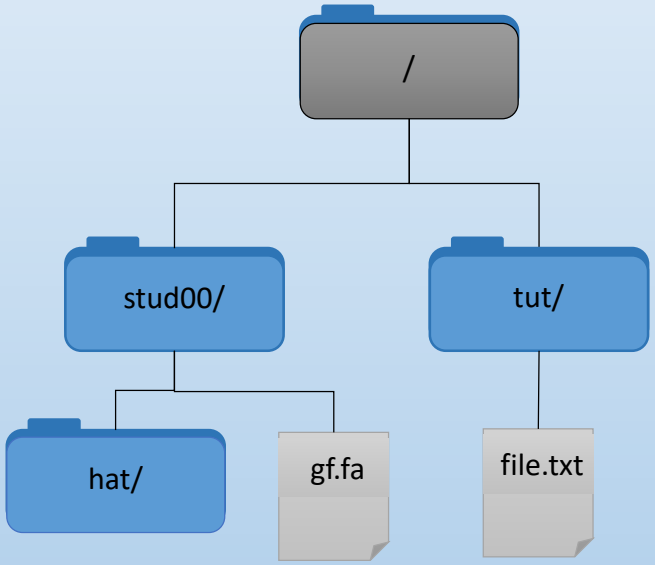
Final



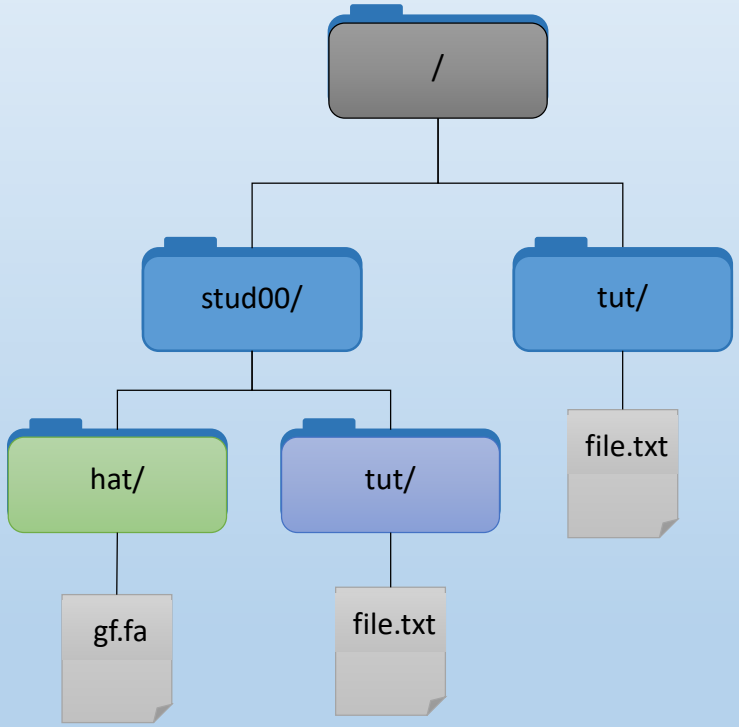
Absolute advantage challenge :

Write the Shell commands that generate the final tree from the initial tree using only absolute paths

Initial



Final



Commands

```
mv /stud00/gf.fa /stud00/hat
cp -r /tut/ /stud00/
```

Another option is

```
mkdir /stud00/tut
cp /tut/file.txt /stud00/tut
mv /stud00/gf.fa /stud00/hat
```

Relative path names

Special relativity:

Write the Shell commands that generate the final tree from the initial tree using only relative paths

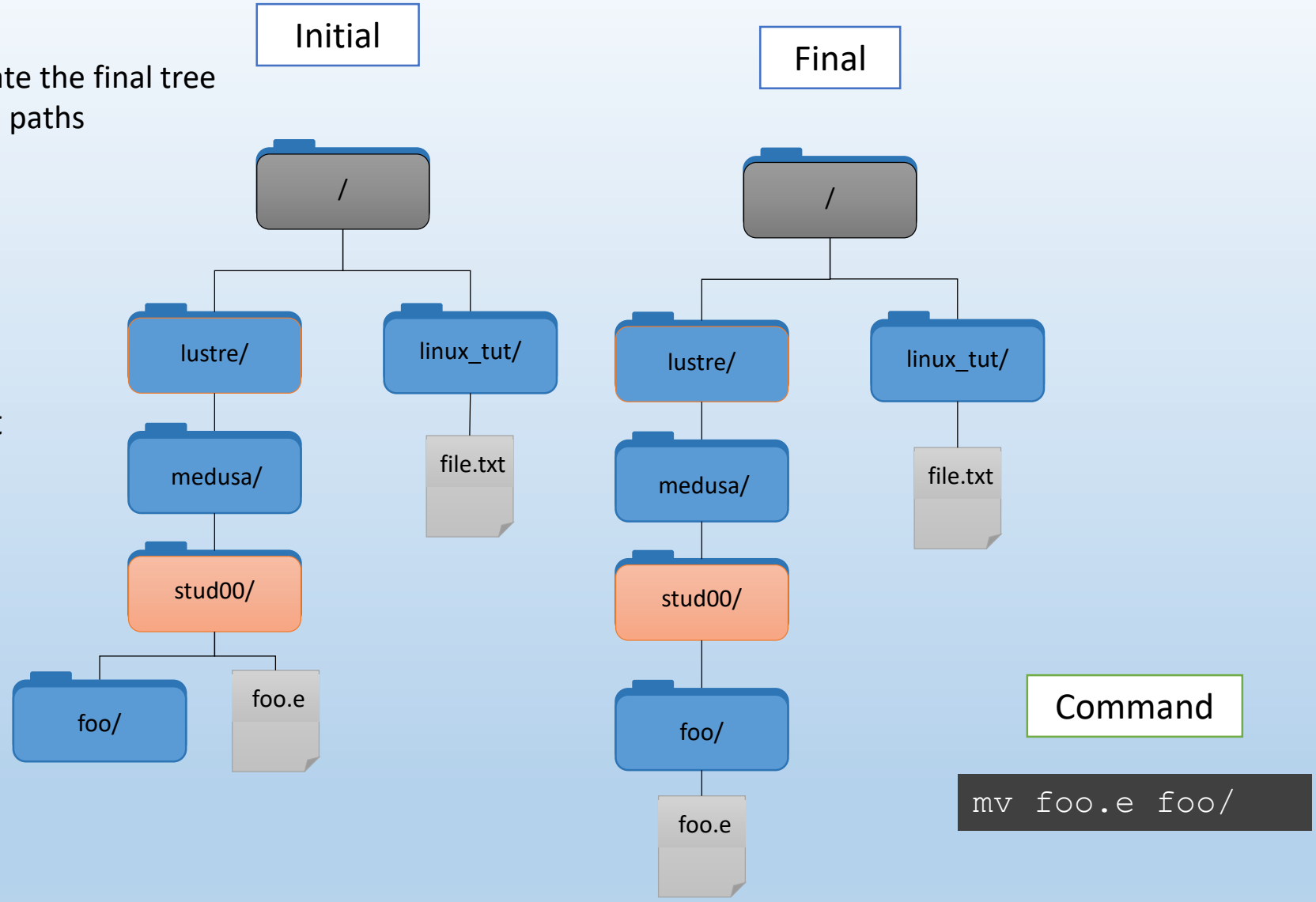
How does it work?

You will be given:

1. An initial path tree
2. A final path tree

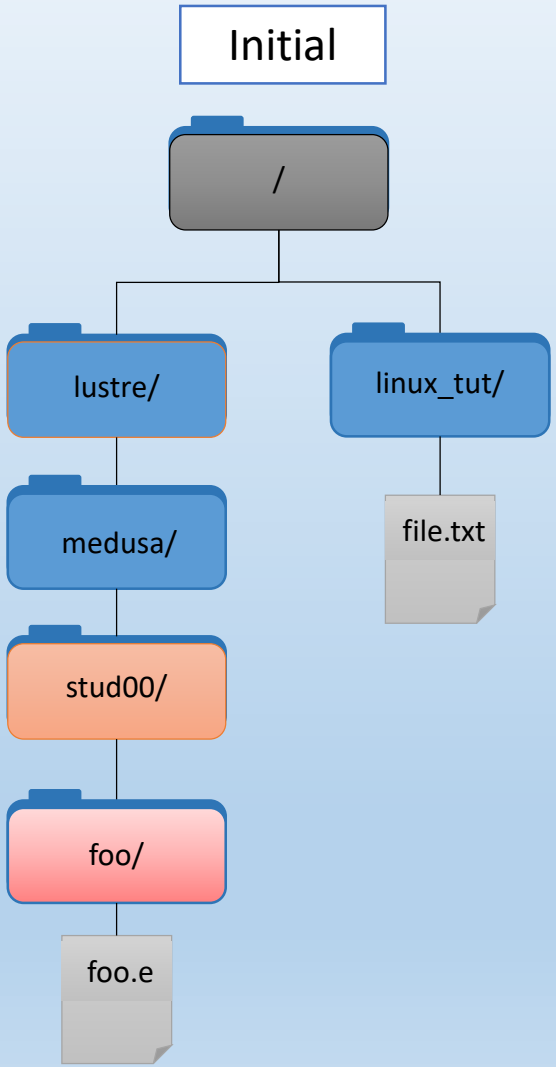
Your mission:

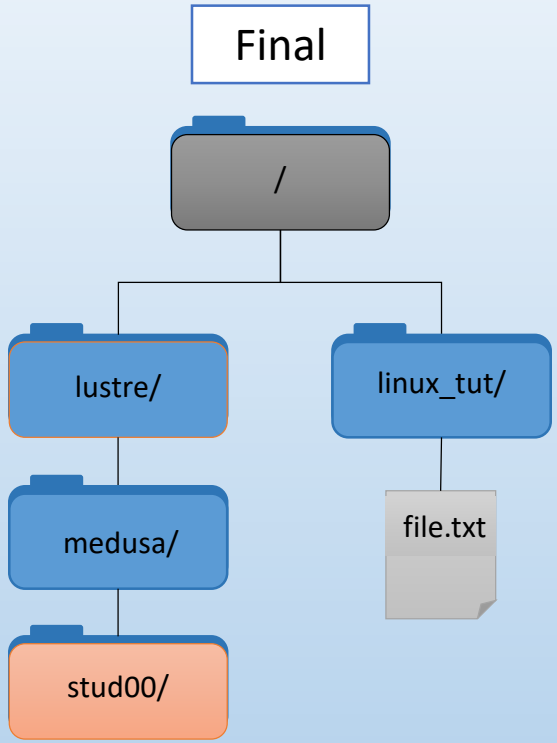
- Write the commands that make the change using relative paths



Special relativity challenge:

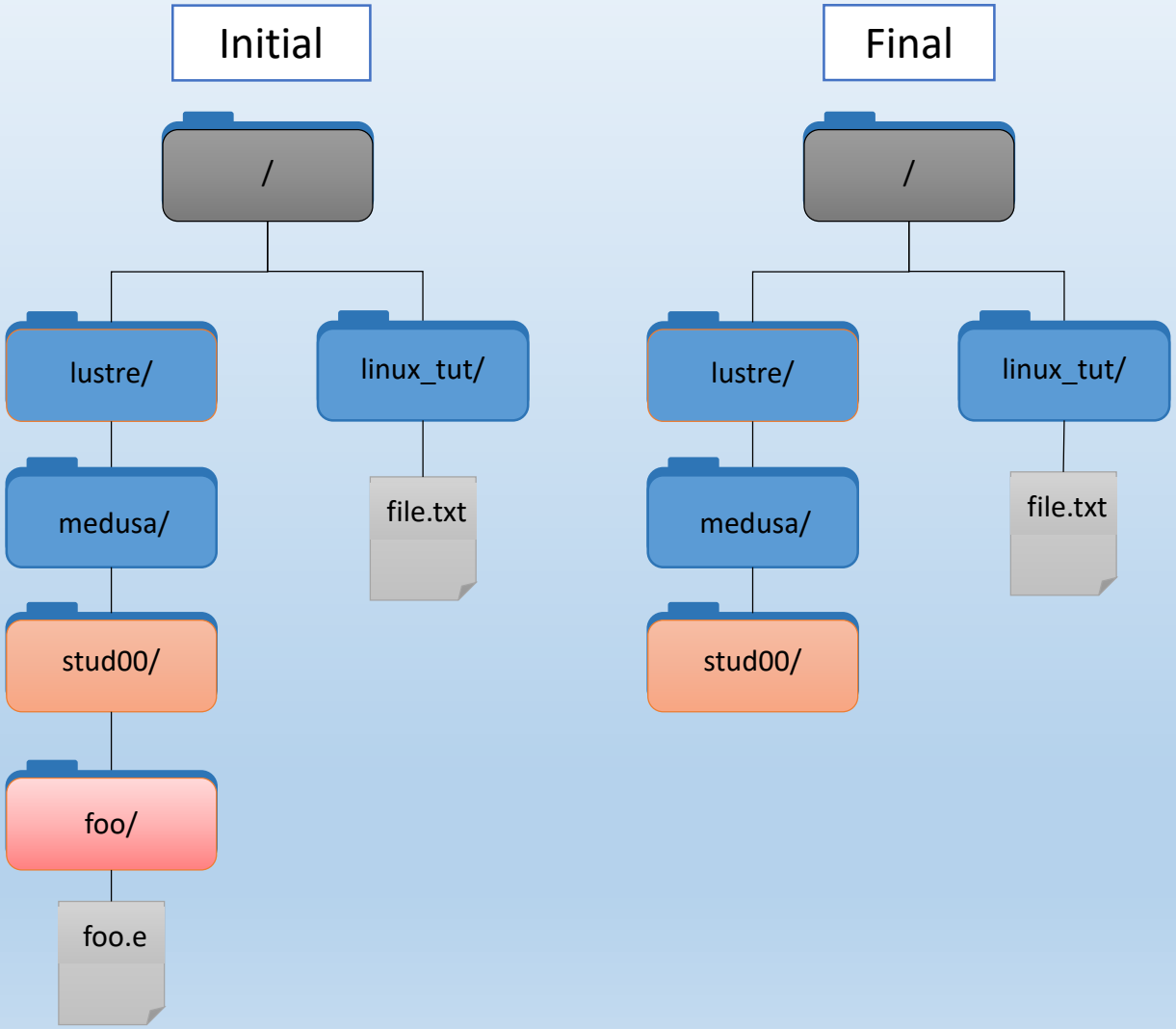
Write the Shell commands that generate the final tree from the initial tree using only relative paths





Special relativity challenge:

Write the Shell commands that generate the final tree from the initial tree using only relative paths

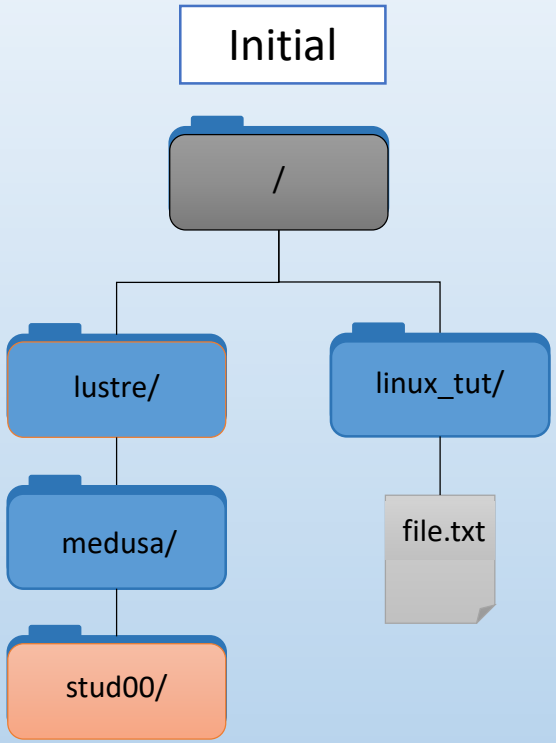


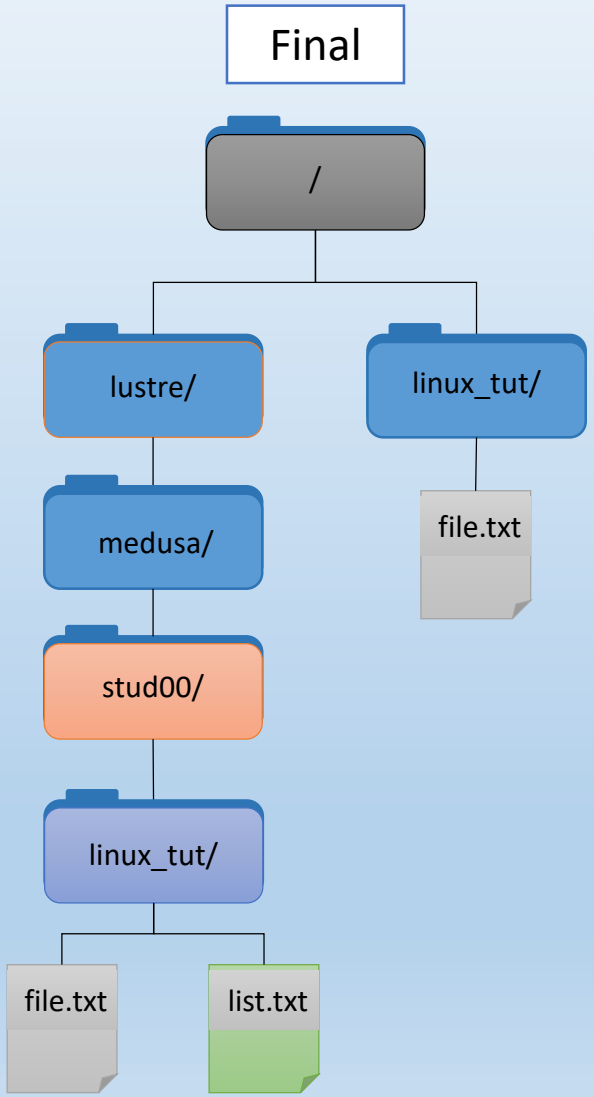
Commands

```
rm -r foo
```

Special relativity challenge:

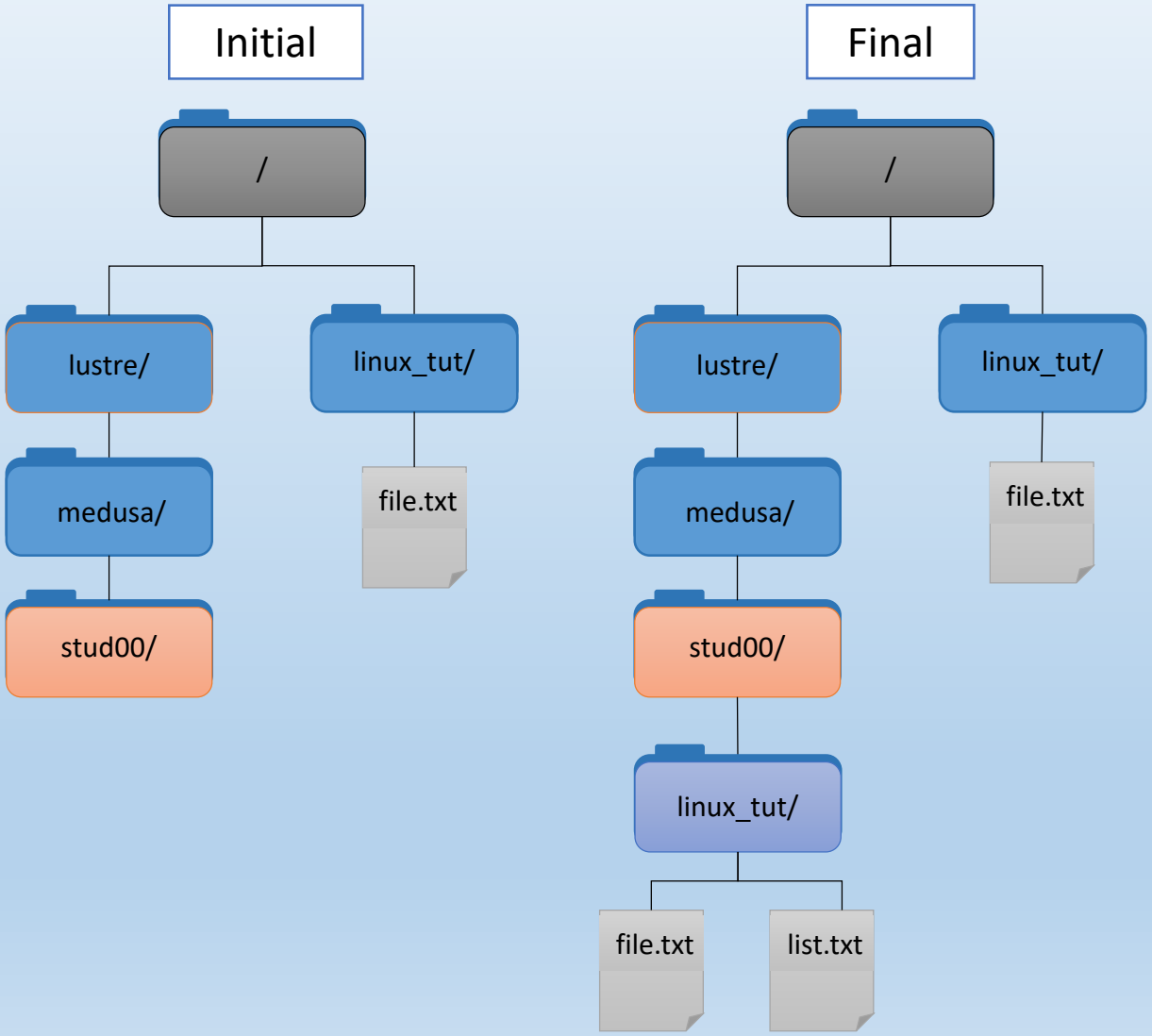
Write the Shell commands that generate the final tree from the initial tree using only relative paths





Special relativity challenge:

Write the Shell commands that generate the final tree from the initial tree using only relative paths



Commands

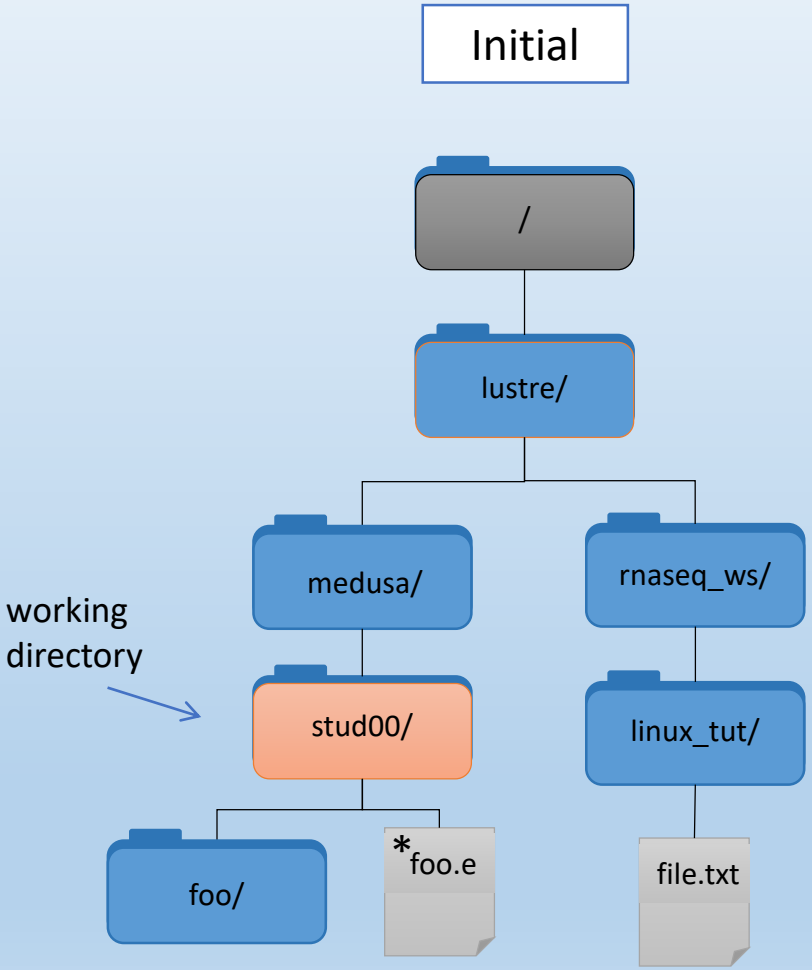
```
cp -r ../../../linux_tut/ .
nano linux_tut/list.txt
```

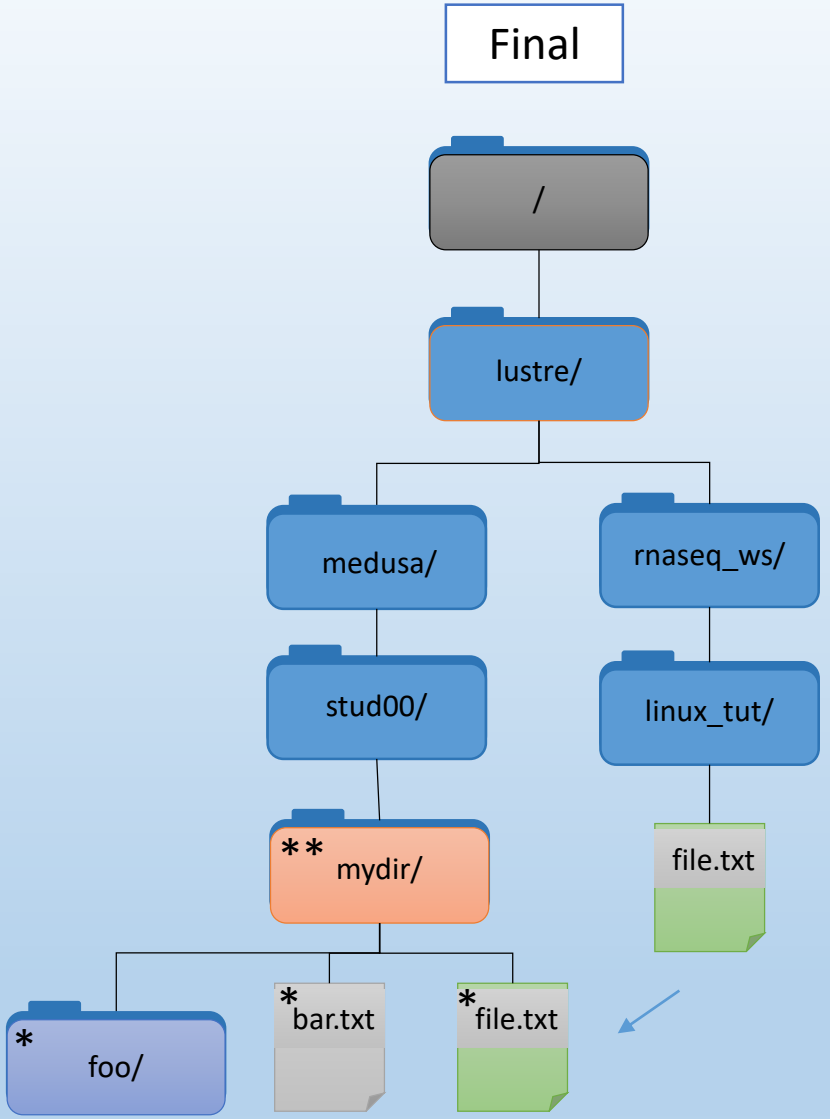
Another option is

```
mkdir linux_tut
cp ../../../linux_tut/file.txt linux_tut
nano linux_tut/list.txt
```

Final challenge

Final challenge:
Write Shell commands that create the final tree from the initial tree





Final challenge:

Describe any differences you can find

Option 1

```
mkdir mydir
rm foo.e
cd mydir
mv ../foo .
nano bar.txt
cp /lustre/rnaseq_ws/linux_tut/file.txt .
```

Option 2

```
rm foo.e
mkdir mydir
mv foo/ mydir
cp ../../rnaseq_ws/linux_tut/file.txt mydir/
cd mydir
nano bar.txt
```

Thank You