

# UNIX oneliners

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Does everyone have the  
git?

# Basic commands to know

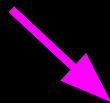
cp	Copy file A to B	cp A B
mv	Move file	mv A B
echo	Print Content	echo "Hello"
cat	Print file	cat A
cut	Show columns	cut -f 1,5 A
less	Show file	less A
sort	Sort a file on columns	sort A
uniq	Make rows in a file unique	uniq A

**Please go to the git folder and move to "unix\_oneliner/data" and test all commands on "playgroundata.tsv"**

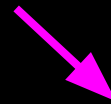
Whats a oneliner?

# Chaining commands

Pipe



Redirect



```
cat playgrounddata.tsv | sort -k 1 | cut -f 1,2 > reduced.tsv
```

| pipe to command

> redirect to file

>> append to a file

tee add to file but also pipe  
to the next command

# Advanced commands

**Search for lines  
containing Paul**



**Substitute A with B  
/A/B/**



```
grep Paul playgrounddata.tsv | sed 's/Paul/Johannes/' | head
```



**For each line in the file**



For each line

Print the entire line  
(\$0)



```
awk '{if($1 == "BTM"){print $0}}' playgroundata.tsv
```

If column 1 (\$1) equals  
BTM

**Lets try it.**

Fetch all the entries of the session BTM, where people were present.

Then sort it alphabetically using the names and print out the 4th column.

**In doubt: Search the internet or ask me**



```
cat playgrounddata.tsv | awk '{if($1 == "BTM" && $3) \
{print $0}}' | sort -k 2 | cut -f 4
```

# Story time

```
$ wc -l */hits.tsv | sort -r -n | grep " 1 " | sed 's/ 1  
/,/g' | cut -f 2 -d, | sed 's/hmmer/,/' | cut -f 1 -d , |  
xargs rm -r
```

# Story time

```
wc -l */hits.tsv | \
sort -r -n | \
grep " 1 " | \
sed 's/ 1 /,/g' | \
cut -f 2 -d, | \
sed 's/hmmer/,/' | \
cut -f 1 -d , | \
xargs rm -r
```

```
624237 GCA_0000207085.2/hits.tsv
1235087 GCF_0000000152.1/hits.tsv
272085 GCF_000000025.1/hits.tsv
160281 GCA_000000043.1/hits.tsv
264851 GCA_0000004930.1/hits.tsv
100286 GCA_000149475.3/hits.tsv
1 GCF_000835515.1/hits.tsv
1 GCF_000835515.1/hits.tsv
120057 GCA_0000014989.1/hits.tsv
1 GCF_000000279.2/hits.tsv
99962 GCA_0000015001.5.2/hits.tsv
1 GCA_002234915.2/hits.tsv
120028 GCA_0000015011.5.1/hits.tsv
1 GCA_002033285.2/hits.tsv
19571 GCA_0000015100.5.2/hits.tsv
1 GCA_001702395.2/hits.tsv
15444 GCA_0000015103.5.1/hits.tsv
1 GCA_001093075.2/hits.tsv
135024 GCA_0000015106.5.2/hits.tsv
1 GCA_000002740.5.1/hits.tsv
12468 GCA_0000015117.5.1/hits.tsv
1 GCA_000091200.5.1/hits.tsv
315603 GCA_0000015129.5.1/hits.tsv
170631 GCA_000151525.1/hits.tsv
```