pwd

ls

ls **-l**

cd Documents/

mkdir bash

git clone https://github.com/CEU-Economics-and-Business/ECBS-5146-Different-Shapes-of-Data

cd ECBS-5146-Different-Shapes-of-Data/artifacts/bash/

cat birdstrikes.csv

head **-n** 3 birdstrikes.csv

head **--help**

man **head**

tail **-n** 5 birdstrikes.csv

head **-10** birdstrikes.csv > first10.csv

cat first10.csv

head **-n** 10 birdstrikes.csv | tail **-n** 1

EX1: Copy the 6th and 7th line of birdstrikes into the myprettypony.csv

head -7 birdstrikes.csv|tail -2>myprettypony.txt

Filtering

cat birdstrikes.csv | grep California

cat birdstrikes.csv | grep **-v** California

cat birdstrikes.csv | grep **-i** CALIFORNIA

Wordcount

wc birdstrikes.csv

man **wc**

Ex2:How many words we have in the first 10 lines of Hamlet.txt?

head -10 Hamlet.txt |wc -w

Ex3: How many incidents were in California (only output line count)

cat birdstrikes.csv|grep -i california|wc -l

Answer:7803

Cutting

What is name of the 1st column:

cat birdstrikes.csv | cut **-d** ';' **-f1** | head **-1**

Display the first 10 records of damage (column 4) and the cost (column 10) columns

cat birdstrikes.csv | cut **-d** ';' **-f4**,10 | head **-11**

Similar to previous example, but now writing all columns, except damage (column 4) and cost (column 10) into a new file:

cat birdstrikes.csv | cut **-d** ';' **--complement** **-f4**,10 > new1.csv

cat birdstrikes.csv | cut **-d** ';' **-f1-3**,5-9,11- > new2.csv

head **-5** new.csv

Ex4: Write state and the bird size columns of the 17th record from birdstrikes, in file called onerepublic.csv. What is the result if run ‘cat onerepublic.csv’?

cat birdstrikes.csv|cut -d';' -f6,9|head -18|tail -1>onerepublic.csv

Sorting

sort birdstrikes.csv | head **-10**

sort **-n** birdstrikes.csv | head **-10**

Reverse sort by damage (column 4)

cat birdstrikes.csv | sort **-t** ';' **-k4** **-r** | head **-10**

Ex5: What was the cost of the most expensive incident?

cat birdstrikes.csv|sort -k10 -t ';' -n|tail -1

Distinct/Unique

sort | uniq - Distinct states in birdstrikes:

cat birdstrikes.csv | cut **-d** ';' **-f6** | sort | uniq | wc **-l**

uniq -c - How many incidents were there by state?

cat birdstrikes.csv | cut **-d** ';' **-f6** | sort | uniq **-c**

tail **-n**+2 birdstrikes.csv | cut **-d** ';' **-f6** | sort | uniq **-c**