```
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ wget
https://raw.githubusercontent.com/raw-lab/BINF2111/main/data/name_game.tsv ──────────── Get the name_game.tsv file from GitHub using wget
--2024-09-04 09:30:24--  https://raw.githubusercontent.com/raw-lab/BINF2111/main/data/name_game.tsv
Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.111.133, 185.199.110.133,
185.199.109.133, ...
Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|185.199.111.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 62 [text/plain]
Saving to: 'name_game.tsv'

name_game.tsv                 100%[===================================>]      62    --•-KB/s
in 0s

2024-09-04 09:30:24 (993 KB/s) - 'name_game.tsv' saved [62/62]

madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ ls ──────────────── List the files in the directory to confirm the download
name_game.tsv
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ gzip name_game.tsv ──────────── Compress name_game.tsv using gzip
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ ls ──────────────── List the files in Lab3 to confirm gzip worked
name_game.tsv.gz
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ gunzip name_game.tsv.gz ──────────── Decompress name_game.tsv.gz using gunzip
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ ls ──────────────── List the files in Lab3 to confirm gunzip worked
name_game.tsv
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ sed 's/\t/,/g' name_game.tsv > name_game.csv ──── Convert name_game.tsv to a CSV using sed
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ head name_game.csv ──────────── Print the first 10 lines of name_game.csv to confirm the conversion
David,abdul,xi,Bill
Mary,david,bill,abdul
Wang,AbDul,xi,Bavid
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ tar -czvf name_game.tar.gz name_game.csv ──── Tarball and gzip name_game.csv and call it name_game.tar.gz
a name_game.csv
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ ls ──────────────── List the files in Lab3 to confirm tar worked
name_game.csv    name_game.tar.gz name_game.tsv
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ rm name_game.csv ──────────── Remove name_game.csv to see how the next command works
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ tar -xzvf name_game.tar.gz ──── Untar and unzip name_game.tar.gz to make name_game.csv
x name_game.csv
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ ls ──────────────── List the files in Lab3 to confirm tar worked
name_game.csv    name_game.tar.gz name_game.tsv
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ tail name_game.tsv ──────────── Print the last 10 lines of name_game.tsv
Davidabdulxi   Bill
Mary      davidbill abdul
Wang      AbDulxi   Bavid
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ cut -c2,3 --complement name_game.tsv ──── Print out everything EXCEPT (--complement) characters 2 and 3
Did   abdulxi   Bill                                                              (-c 2,3) in the first column of name_game.tsv
My    davidbill abdul
Wg    AbDulxi   Bavid
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ cut -c2,3 name_game.tsv ──── Print out characters 2 and 3 (-c 2,3) in the first column of
av                                                                                name_game.tsv
ar
an
```

```
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ cut -d "," -f 1 name_game.csv
David
Mary
Wang
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ sort -k 2 name_game.tsv
Wang      AbDulxi   Bavid
Davidabdulxi   Bill
Mary      davidbill abdul
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ cut -f 3 name_game.tsv | sort -ur
xi
bill
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ sort -t "," -k 2r name_game.csv
Mary,david,bill,abdul
David,abdul,xi,Bill
Wang,AbDul,xi,Bavid
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ cut -f 3 name_game.tsv
xi
bill
xi
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ cut -f 3 name_game.tsv | grep "xi"
xi
xi
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ cut -f 3 name_game.tsv | grep "xi" | uniq -c
   2 xi
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ cut -f 3 name_game.tsv | grep -c "xi"
2
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ cut -f 2 name_game.tsv | grep -ci "abdul"
2
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ printf "This is a number: %d\nThis is a string: %s"
72 "hello"
This is a number: 72
This is a string: hello%
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ printf "%s\n" "#\!/bin/bash" "#This is a script"
"echo 'Hello World'" > hello_world.sh
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ ls
hello_world.sh name_game.csv  name_game.tsv
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ cat hello_world.sh
#!/bin/bash
#This is a script
echo 'Hello World'
madelinebellanger@Madelines-iMac:~/Desktop/BINF2111/F24/Lab3$ bash hello_world.sh
Hello World
```

Annotations (right margin):

- Print out column 1 (-f 1) in name_game.csv
- Sort column 2 (-k 2) of name_game.tsv
- Print column 3 (cut -f 3) of name_game.tsv and sort it (sort) in reverse order (-r) and remove duplicates (-u)
- Sort column 2 (-k 2) of name_game.csv in reverse order (-r)
- Print column 3 (-f 3) of name_game.tsv
- Print all of the "xi"s (grep) found in column 3 (-f 3) of name_game.tsv
- Print the count (uniq -c) of all of the "xi"s (grep) found in column 3 (-f 3) of name_game.tsv
- Print the count (grep -c) of all of the "xi"s (grep) found in column 3 (-f 3) of name_game.tsv
- Print the count (grep -c) of all of the "abdul"s (grep) found in column 3 (-f 3) of name_game.tsv, ignoring the case (grep -i)
- Print a phrase to the screen with a digit (%d) and a string (%s) as inputs
- Print a phrase to hello_world.sh with each string being on a separate line (%s\n)
- List all of the files in Lab3 to confirm hello_world.sh was created
- Print the contents of hello_world.sh
- Run hello_world.sh