

1. Which of the following Unix commands can be used to view the content of a file?

more

gzip

ls

cp

2. Which of the following commands can be used to compress the content of a file?

less

more

head

gzip

3. The file “months” lists each of the 12 months on a separate line, and no further lines. What would be the result if the following command was run:

```
``cat months | head -1000 | wc -l``
```

50

12

months

year

4. What is the effect of using the pipe operator ‘|’ in a sequence of commands:

Replace the ‘;’ sequencing operator in a complex command

Act as a character separator between different shell commands, without any effects on the outcome

Re-direct the standard input or standard output of a command

Re-direct standard error only

5. If typing 'pwd' produces "/home/userA/Coursera/L1/", which of the following commands will list the file content of the current directory?

cat .

sort * | ls

ls .

uniq -c

6. Suppose your current working directory is "/home/Coursera/L1/", and "peach", "apple" and "pear" are subdirectories, each containing a single file named "genome". What would be the current directory, as reported by running the 'pwd' command, after each of the four commands in the sequence below:

...

cd apple

rm *

cd ../..

mv apple plum

...

/home/Coursera/L1/apple

/home/Coursera/L1/apple

/home/Coursera

/home/Coursera

apple

apple

apple

plum

apple

apple

apple

plum

/home/Coursera/L1

/home/Coursera/L1/apple

/home/Coursera/L1/pear

/home/Coursera/L1/plum

7. Consider the file “seasons” with the following columns separated by spaces ‘ ‘:

```
...  
January 1 winter  
...  
December 12 winter
```

What would be the sequence of outputs for the following commands:

```
```cut -d ' ' -f1,3 seasons | sort -u | wc -l" and "cut -  
f1 seasons | sort | uniq -c | wc -l```
```

3, 4

4, 6

**12, 12**

12, 20

5, 10

4, 4

12, 4

4, 12

12, 3

4, 3

3, 12

8. Your current working directory is named “Plants”. Its subdirectory “apple” contains the files “apple.genome”, “apple.samples” and “apple.genes”. What would be the result of the command ````rm -r apple````?

The “apple” directory and all of its content will be removed

All files containing the string “apple” in their names will be removed

**The command will have no effect, since the directory is not empty**

The directory apple will be removed and all of its files will be redirected elsewhere

9. Suppose that you have two files, A and B, containing experiment data:

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5,1,2

4,1,3

**3, 1, 3**

1000,10,2

10. The current working directory contains four subdirectories named “apple”, “pear”, “peach” and “strawberry”, each with the following files: “genome”, “genes” and “samples”. Which of the following commands would extract the top line from all of the “genes” files?

cat \*/genes strawberry/genes | grep -c 1

less \*/g\* | head -1

cat \*/genes strawberry/genes | tail -1

**head -1 \*/genes strawberry/genes**