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

**more**

gzip

ls

cp

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

less

more

head

**gzip**

1. 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

1. 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

1. 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

1. 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

1. 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

1. 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 ```rmdir 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

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

13

5,1,2

4,1,3

**3, 1, 3**

1000,10,2

1. 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 \*p\*/genes strawberry/genes | grep –c 1

less \*/g\* | head -1

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

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