

CS1007 Reassessment: Scripting and Git

Part 1 – Command-line operations

1. 3 benefits of a command line environment over a graphical desktop environment are:
 - a. You can write scripts to automate common tasks
 - b. The command line uses much less resources than a GUI, enabling you to access it remotely, unlike a GUI
 - c. The command line is also much quicker to use and operate as it only requires the usage of a keyboard, whilst a graphical environment requires, comparatively, slower mouse movement.
2. The command to list the contents of the /Reassessment directory would be:

```
$ ls /cs/studres/cs1007/Assesement/Reassessment
```

The command to display the contents of the file /Reassessment/data.txt would be:

```
$ cat /cs/studres/cs1007/Assesement/Reassessment
```

3. The command to display a long listing for the file Reassessment/data.txt would be:

```
$ ls -l /cs/studres/cs1007/Assesement/Reassessment
```

4. All the lines in the file /usr/share/dict/linux.words that contain the sub-string “later”:

```
$ grep 'later' /usr/share/dict/linux.words
```

5. Number of lines that contain the substring “later” in the file /usr/share/dict/linux.words:

```
$ grep 'later' /usr/share/dict/linux.words | wc -l
```

6. All lines in /usr/share/dict/linux.words file that's start with “boat”

```
$ grep '^boat' /usr/share/dict/linux.words
```

7. All lines in the /usr/share/dict/linux.words file that ends with “phous”

```
$ grep 'phous$' /usr/share/dict/linux.words
```

8. Create a directory called “outputs” in the current working directory

```
$ mkdir outputs
```

9. Command to redirect out of Question 3 to a file called "laters.txt" in the "outputs" sub-directory

```
$ ls -l /cs/studres/cs1007/Assesment/Reassessment > outputs/laters.txt
```

10. Copy the file /usr/share/dict/linux.words to the "outputs" sub-directory

```
$ cp /usr/share/dict/linux.words outputs
```

11. Create a compressed archive of the "outputs" sub-directory

```
$ zip outputs.zip -r outputs
```

12. Give the awk(or gawk) command to produce this output:

gandalf228-Manchester

admin98807-London

mastercheif65-Depot

jenkins46-Glasgow

agentsmith79-Engineering

from the file /cs/studres/CS1007/Assessment/Reassessment/data.txt:

```
$ gawk 'BEGIN{FS="," ; OFS="-" } {print $1, $4 }'  
/cs/studres/CS1007/Assessment/Reassessment/data.txt
```

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