

## Session 2 Worksheet SOLUTIONS

### Question One

*Using the terminal find out what processes are running. Find out the command to search for a process based on its port number. If running the process on your own machine, open a program such as Firefox, find out its process name and end the process (you should see the window close).*

There are many commands to see which processes are running. Here are some of them:

- > **ps -a** (the a command displays information about other users' processes as well as your own). You will usually see -aux where x shows processes without a controlling terminal and u narrows down the processes to your username)
- > **top** (this shows processes using the most memory)
- > **netstat** (this shows networking information and will give you the process id if you use the flag -p)

We can pipe the output from netstat into grep to look for a certain port number as so:

```
-> netstat -nlp | grep :80
```

There are multiple other options eg lsof -i :80. Port 80 is used as an example in both these answers.

To find firefox:

```
-> ps ax | grep firefox
```

To kill a process:

```
-> kill -9 3544 (where 3544 is an example of the pid you may find from the previous command)
```

### Question Two

*Explore Linux file permissions in a capture the flag scenario! You'll need Docker for this exercise, so either download Docker or use this website: <https://labs.play-with-docker.com/#>*

For a video walkthrough of this challenge, [see this YouTube video](#) explaining the steps taken along the way and what leads to making those decisions.

### Bandit Continued...

For a Bandit walkthrough, you can take a look at [this answer key](#) I prepared during my first run through. Keep in mind there are often several ways to do the same thing and the route I took might not be the best one!