## Lab 2 – Unix and Shell Scripting

Commit and Push to GitHub after each task.

## **Tasks**

- 1. Clone the Lab2 Repository from GitHub Classroom into the ee347 folder, as demonstrated, using this link.
- 2. Using the terminal, redirect the output from the 1s command to task2.txt.
- 3. Edit task3.sh to print 'Hello World!' to the terminal.
- 4. Make task3.sh executable for the user only using the **chmod** command and run the script.
- 5. Edit task5.sh to greet the user 'Hello **Name**!', where **Name** is passed as an argument when executing task5.sh.
- 6. Copy task5.sh into task6.sh and edit the script to **append** the 'Hello **Name**!' output to task6.txt.
- 7. Edit task7.sh to take two integers as arguments, and to perform 6 mathematical operations on them  $(+, -, *, /, %, ^)$ , as below:

```
pi@raspberrypi:~ $ ./task7.sh 8 4
8 + 4 = 12
8 - 4 = 4
8 * 4 = 32
8 / 4 = 2
8 % 4 = 0
8 ^ 4 = 4096
```

8. Edit task8.sh to take four arguments (2 integers, 2 strings), and compare these values, as below:

```
pi@raspberrypi:~ $ ./task8.sh 1 2 three four
1 is less than 2
three is not equal to four
pi@raspberrypi:~ $ ./task8.sh 2 1 three three
2 is greater than 1
three is equal to three
pi@raspberrypi:~ $ ./task8.sh 1 1 two two
1 is equal to 1
two is equal to two
```

- 9. Edit task9.sh to print 'Hello World! to the terminal 10 times. Use a loop.
- 10. Edit task10.sh to continually append names to task10.txt, until the user types 'quit'.

```
pi@raspberrypi:~ $ ./task10.sh
John Doe
Jane Doe
quit
pi@raspberrypi:~ $ cat task10.txt
John Doe
Jane Doe
```