

# UNIX PROGRAMMING - DV1457

## LAB 1

### Team Members

Albert Fiati-Kumasenu - 890808-4794

### Commands used

|                 |   |
|-----------------|---|
| <b>grep</b>     | This was used to search the log file based on a specified pattern. The <b>-q</b> flag was used so that grep will not display the output on the standard output  |
| <b>nslookup</b> | This is used to query the internet domain name servers to get the domain name based on a submitted IP   |
| <b>awk</b>      | This was used basically to extract information from the piped output and formatted in a presentable manner  |
| <b>rev</b>      | This command was used to reverse the string to enable me select the domain name from the nslookup result  |
| <b>cut</b>      | The cut command was used to break up a string into blocks based on a pattern and then select the needed elements. It is primarily used to fetch portions of the string. The <b>-d</b> flag was used to set the delimiter for splitting the string |
| <b>sort</b>     | This command was used to sort the output from the queries. The <b>-r</b> flag is used to perform the sort in a reverse order  |
| <b>uniq</b>     | This command was used to read the output and extract content such that duplicates are not displayed. It was used with the flag <b>-c</b> to get the count of duplicates.  |
| <b>head</b>     | This command was used to limit the number of display lines presented  |
| <b>cat</b>      | This command was used to print the content of the output on the standard output   |

### Challenges:

Working with arrays was quite a challenge as it technically was limited and hence displayed operational challenges. Also, loops are very slow in the bash environment. To perform the optional task, I tried to call a custom function in the **awk** command but proved impossible and hence I decided to loop through the piped results and apply the custom function in there

### Limitations

The order of options provided is static. Which means if the order is changed, the script will give wrong outputs or might not execute at all. In future development, this can be made dynamic.

Also, I will like to find a way of eliminating the loop used in optional task