WEEK 1 ASSIGNMENT SOLUTIONS

1) **Moving Files from one Folder to Another Folder**

```
for file in `ls *.txt`;
do
        folderName=`echo $file | awk -F. '{print $1}'`;
        mkdir $folderName;
        mv $file $folderName;
done
```

2) **Appending Date to File Name**

```
for file in `ls .*log.1`;
do
        echo $file; name=${file%%.*};
        Date=`date %d%m%Y`;
        ext=${file#*.}; newFile=${name}${Date}.${ext};
        mv $file $newFile;
done
```

3) **Data Analysis/Manipulation**

   a) awk '{
        if($4>10000)
              print$2" "$7
        }' data.csv

   b) cat Day3Probs01data.csv | grep -v CAPTAIN |
      awk '{sum+=$7} END {print sum}'

   c) awk'{
        if($5>7000 && $5<10000)
              Print $3" "$5
        }' Day3Probs01data.csv

   d) awk '{sum+= $4} END {print sum/NR}'
      Day3Probs01data.csv

4) Check 'Hello' and 'ls' Execution

```
>Hello
echo $?
ls
echo $?
```

5) Set Environment Variable

```
If[ usersecret -ne  ]; then
        echo "Already Set"
else
        export usersecret = "dH34xJaa23"
fi
```

6) Find 'systemd' in Multiple Files

```
#!/bin/bash
cd /var/log
for file in $(ls *.log)
do
   count=$(grep -o -i systemd $file | wc -l)
if [ $count -ne 0 ]
then
        echo -e $file"\t"$count
fi
done
```

7) Create Process table and View

```
ps -elf | awk '{print $2" "$3" "$15" "$5" "$6}'
```

8) Print last 4 Frequently Used URLs in a file in Sorted Order

```
awk '{print $4" "$11}' access.log | sort -r | uniq | tail -4
```

9) **Print Last 4 unique URL's count used at particular Hour**

cat access.log | awk '{print $4 $11}' | sort -k 4 | uniq -c | tail -4

10) **Print Last 10 Unique sorted Client IP**

awk '{print $26}' access.log | sort | uniq | tail -10

11) **Print List of Web Response Code**

Cat access.log | awk '{print $9}' | sort | uniq -c

12) **Check for Folder**

directory=~/TerminalCommands/Day1LinuxCommands
[[-d $directory]] && echo "FILE EXISTS"
[[! -d $directory]] && mkdir NewFolder

13) **Folder Backup**

mkdir original
mkdir updated
cd original
nano original-file.sh
cd ..
cd updated
nano updated-file.sh
diff /TerminalCommand/original/original-file.sh
updated-file.sh
cp -r ~/TerminalCommand/original
~/TerminalCommand/original-backup
cd ..
cd original
Nano original-file.sh
diff /TerminalCommand/original/original-file.sh
updated-file.sh